THE ENGLISH CAPITAL MARKET

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PREFACE

AT the risk of being charged with an attempt to rob criticism of its rightful bread, I feel bound to meet in advance an objection which may be made to the general character of this book: the objection, namely, that the convulsive changes of the last six years have so greatly affected the work of the Money Market that they have fundamentally altered the nature of the services it contributes in the economic organization of this country.

Yet, when an engine is out of order, the skilled mechanics who are called in to examine and repair it bring with them no new *ad hoc* set of mechanical principles; and the fair-minded patient, though his state of mind argues a world in revolution, recognizes that the principles of physiology have not ceased to operate. The tale runs that an eminent divine, after a decisive defeat of his party in the House of Commons, returned home and planted mustard and cress in his garden. Not long after he was able to assure his friends that, crushing as had been their political defeat, the herbs had nevertheless come up in much the usual way. It may be that they would grow now in the garden of the Bank of England, or even in a land reshaped to the lives of heroes.

It is true that the war has loosened ideas, has released influences hitherto held in check by a sense of the inherent unalterableness of things, and by so doing has modified our general conceptions of the true relations among members of a modern society: in particular the relations between rich and poor, and between master and man. But the economic centre of the social organization has surely not greatly changed. Much the same impulses and much the same needs govern the adjustment of economic resources to economic ends; the long chains of processes through which materials pass on their way from the soil to the consumer are much the same as they were, though their operation is disturbed by an additional set of difficulties introduced by the war.

This seems to be especially true in those inner and strictly business processes with which the Money Market is concerned. The banks still supply the means of effecting payments in the form of a cheque currency of unrivalled efficiency; they and the Issue Houses still collect capital from points of plenty and carry it to points of scarcity; the company promoter, in the old extravagant way, still supplies business ability with the resources required to give it scope; severe alternations of economic activity and stagnation still arise from infectious changes of confidence on the part of the business men to whom society still entrusts the administration of its resources. Broadly speaking, the same principles of action lead to the same social economies and the same social wastes, though they work themselves out with less sureness and precision in face of the greater uncertainty which in present conditions affects all business adjustments.

If this book aimed at a descriptive account of the detailed phenomena of the Money Market, it would necessarily be concerned mainly with the manner in which the market was adjusting its operations to the special disturbances arising from the war, and would deal principally with such matters as the abolition of time dealings on the Stock Exchanges, the influence of public finance on monetary conditions and the prospects of a return to an effective gold standard. But that is not its object. Its main purpose is one not of description but of interpretation. It attempts to trace the nature of the economies which the market effects as part of the organization of production, and to express those economies in terms of economic welfare. That being its object, it is concerned less with the special difficulties arising during the present period of transition than with those more general and fundamental conditions which are common to the present time, the past, and, it may reasonably be expected, the future.

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CONTENTS

PART I

LEADING IDEAS

CHAP. PAGE

I. Introductory 1

II. The Market in relation to Money and Capital . 6

III. The Market in relation to Credit . . . 14

IV. General View of the Market 19

PART II

OUTLINE OF THE THEORY OF MONEY

V. The Quantity Theory 22

VI. The Demand for Money 29

VII. The Supply of Money—Its Technical Efficiency . 36

VIII. Do. —Its Stability of Value . 43

IX. Do. —Social Disturbances due to Instability of Value . 51

X. Summary 60

PART III

THE TRANSPORT OF CAPITAL

XI. The Flow of Resources into Investment . . 65

XII. The Influence of the Market on the Supply of Capital—Waiting 73

CHAP. PAGE
XIII. THE INFLUENCE OF THE MARKET ON THE SUPPLY OF CAPITAL—RISK . . . 82
XIV. Do. —RISK ARISING FROM IMPERFECT KNOWLEDGE . . . 85
XV. Do. —RISK ARISING FROM THE IMMOBILITY OF INVESTED RESOURCES 91
XVI. Do. —MARKETING . . . 98
XVII. THE INFLUENCE OF THE MARKET ON THE DEMAND FOR CAPITAL 102
XVIII. REVIEW OF MARKETING OPERATIONS . 112

PART IV

INDIVIDUAL MARKETING ORGANIZATIONS

XIX. THE BANKING SYSTEM—PRELIMINARY . . . 125
XX. Do. —THE TRANSPORT OF CAPITAL; ITS COLLECTION AND POOLING 134
XXI. Do. —THE TRANSPORT OF CAPITAL; ITS DISTRIBUTION . . 140
XXII. Do. —THE PROVISION OF THE CHEQUE CURRENCY . . . 147
XXIII. Do. —THE VOLUME OF THE CURRENCY 150
XXIV. Do. —THE ELASTICITY OF SUPPLY . 154
XXV. Do. —THE MACHINERY OF REGULATION 161
XXVI. Do. —THE REGULATION OF THE CURRENCY . . . 165
XXVII. Do. —CONCLUSIONS . . . 177
XXVIII. THE MARKET FOR STOCK EXCHANGE SECURITIES—NEW SECURITIES 182
XXIX. NEW SECURITIES (*continued*)—THE CHARACTERISTICS OF THE MARKET . . .

CONTENTS

PAGE

XXX. NEW SECURITIES (*continued*)—THE SALE OF HIGH-CLASS SECURITIES . . 193

XXXI. Do. —THE VOLUME OF INDUSTRIAL SECURITIES . 200

XXXII. Do. —THE SALE OF INDUSTRIALS . . 207

XXXIII. Do. Do. (*continued*) 213

XXXIV. THE MARKET FOR OLD SECURITIES . . . 220

XXXV. THE LONDON STOCK EXCHANGE 223

XXXVI. Do. (*continued*) . . 228

XXXVII. SPECULATION ON THE LONDON STOCK EXCHANGE . 232

XXXVIII. THE DIRECT PRODUCT OF THE SPECULATOR . . 235

XXXIX. THE SPECULATOR'S PROFIT 240

XL. Do. (*continued*) . . . 245

XLI. THE INFLUENCE OF THE SPECULATOR ON PRICES . 250

XLII. OTHER INCIDENTAL EFFECTS, AND CONCLUSION . 257

XLIII. TRADE CREDIT 263

XLIV. CONCLUSION 274

NOTES 283

INDEX 295

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PART I.—LEADING IDEAS

CHAPTER I

INTRODUCTORY

MODERN industrial communities may have much to learn from older civilizations with regard to the art of living; but they have at least this great quality, that they are unsurpassed in industrial efficiency. There is nothing in the past to parallel a productivity like that of England, where an inconsiderable island is made to yield annually products valued in 1914 at more than £2000 m., and to support a population of over 40 millions of people.

The great growth in the industrial power of modern communities has been accompanied by a change in their social structure, or more exactly by a much higher development of characteristics which have always been present. The great branches of production have grown more distinct; the trades within them have moved apart and become more clearly defined, and the complex operation undertaken by each trade has, as it were, been taken to pieces and separated into its elementary processes.

The incentive to this change arises from the great productive efficiency which accompanies specialization; for this separation of processes makes it possible to employ each human and mechanical agent uninterruptedly on a narrow range of work of a kind adapted to its highest productive capacity.

The term "Division of Labour" describes this general tendency of specialization in so far as it affects one of the agents of production—human beings; but it does not bring out clearly the fact that the tendency affects also the other agents—capital and land. When an operation is broken up into separate processes, it is evidently an economy of the first importance to group these simpler processes together and to engage continuously on each the class of workpeople (or managers) whose abilities and training are specially adapted to the purpose. But what is true of Labour is true also of Capital and Land. It is economical in exactly the same way to apply to each process its appropriate specialized machinery and to allocate each group of processes to the site which offers the greatest natural advantages, whether of soil, of climate or of position. The more general statement of this tendency is, therefore, that the growth of industrial power is associated with an increased ability to break up industrial operations into their elementary parts, to group together the similar parts and to redistribute these groups in such a way as to concentrate upon each the human skill, mechanical arrangements and natural advantages most suitable for their performance.

But the ability to break up and separate the parts of an operation in this way is itself dependent upon another condition ; such subdivision can obviously be carried out only if there is a corresponding development of communications, by means of which the dissociated parts are co-ordinated and inter-connected. The system of communications falls naturally into three parts : the transport of intelligence, of material things and of value. Their effects may be briefly considered in that order.

It is evident that the separation of cotton marketing from cotton manufacture and its concentration in Liverpool and Manchester has been greatly facilitated by the development of the telephone, the telegraph and the postal system. Similarly, if a factory operation hitherto carried out by one man is to be subdivided between two, this can be done only by introducing some co-ordinating mechanism such as a foreman, who takes over a part of the mental processes and acts, as it were, as a bridge regulating and co-ordinating the operations of the two workpeople.

In the same way, the development of means for transporting material goods is a most important condition in the separation of processes. Just as the mechanical carrier in the large shop facilitates a more complete separation between the selling and accounting branches of the business ; so the railway and the steamship release factories from the sources of their raw materials and enable them to settle on distant sites more suited to their particular operations. It was the growth of railways which liberated cotton-growing in India from the outskirts of each village and enabled it to move to more remote areas of greater natural advantages.

Finally, this ability to concentrate each producing agent on a narrow range of services is dependent on the growth of the system by which value, or general purchasing power, is readily transferred from one person to another. It is dependent on the provision of means and facilities for making payments, *i.e.* on the provision of means for effecting payments in general and on the provision of facilities for effecting those particular payments by which capital is transferred from the control of one party to another.

It is evidently possible for individual producers to concentrate their energies on the output of a single kind of service or product only in so far as means are provided by which these products may be quickly and conveniently exchanged by way of purchase and sale; their specialization is limited by the efficiency of the money system—by the ease and safety with which the community can make the payments by means of which these products are redistributed; and each improvement in the form of the currency enables this specialization to be carried out more completely than before. The development of the cheque currency in England marks a great increase in the efficiency of this kind of communication. A return even to a sound gold coinage would be equivalent to a heavy tax on all distant dealings; for the purchase of goods from a distance would involve the expenses and risks of sending coin in payment. In such conditions, therefore, many of these purchases would no longer be made, and production would be concentrated to a less extent at the most suitable sites; in other words specialization would be checked, and productive capacity would be appreciably impaired.

The development of a specialized class of entrepreneurs undertaking the management of business is dependent in a similar way on the transport of capital; it is facilitated by every increase in the efficiency of the machinery by which purchasing power devoted to capital uses is carried into the hands of business men. In the absence of the banks and other machinery for the transport of capital, business undertakings would be formed only when the ownership of capital and business ability happened to coincide; but with the development of this machinery for joining together capital and business ability each can be separately produced; the resources of the capitalists who have no aptitude for business management are joined to the ability of the entrepreneurs who lack capital; consequently the supply of each of the two agents becomes increasingly specialized with great advantage to the productive capacity of society. Just as the cost of production of a factory is reduced by the development of railways, steamships and similar transport facilities which enable its constituent parts to be produced at the most efficient sources, so the cost of production of a business undertaking is lessened by the work of the Money Market in transporting capital and thereby giving scope for the separate supply of the two elements, capital and business power, of which the undertaking is composed. Striking evidence of the organic changes introduced by the development of the Money Market is seen in the growing separation of the investor and the entrepreneur which accompanies the rapid increase in public joint-stock companies.

The machinery for the transport of value consists therefore of two distinct parts; each of these parts is concerned ultimately with facilitating payments; each exercises an influence on the specialization of productive resources analogous to that of the railway and the telegraph. The influence of the first part depends on the efficiency of the money system, that is to say, on the ease and safety with which payments in general can be effected. The influence of the second part depends on the efficiency of the machinery for transporting capital, that is to say, on the economy with which money available for capital uses is carried from those in whose hands it accumulates to those by whom it is applied to its various uses.

There is then this triple system of communications dealing with intelligence, material things and value. Every improvement in this system not only introduces its own immediate economies but operates as a solvent, enabling processes naturally allied to be separated and regrouped in such a way that more highly specialized agents of production may be brought to bear on them and a further set of economies realized. And this specialization in its turn reacts on the efficiency of the means of communication.

These economies stated in an abstract form do not greatly impress the mind, and it is adding little to point out that they form the main basis of the economic argument for Free Trade. In the concrete they are perhaps most clearly seen in the conditions of large towns. Evidently the essential economic circumstance of a large town is simply the physical proximity of the people congregated there. This proximity implies an enormous economy in the cost of communications; speech is substituted for the written letter; material goods need to be carried much shorter distances; exchanges are facilitated and the risks of loans are greatly reduced. These economies in communications mean large accessible markets; and large markets, in their turn, lead directly to more highly specialized forms of production and yet further economies. These twofold economies are reflected in the huge site rents of densely populated areas, and indeed, if allowance is made for non-economic considerations and for such purely physical site advantages as climate and water power, are measured by those site rents.

The lines of this argument are old and familiar. They are restated with the view of bringing out as clearly as possible the fact that more efficient means of communication have results beyond the direct economies which they introduce; for, over and above these immediate economies, they enable society to attain greater productive efficiency by breaking its work into more elementary parts, regrouping these parts and applying to each group a more highly specialized form of the services of human beings, mechanical appliances and land.

This book is concerned only with that part of this system of communications which has been distinguished as the transport of value, a part which may be roughly identified with what is known as the Money Market. Its object is to bring out the social significance of the market as a coherent part of the organization by which resources are adjusted to needs: to connect market phenomena with economic welfare. The market, like the telegraph and the railway, forms part of the general means of communication; accordingly every increase in its efficiency encourages an organic development of society and gives scope for a higher productive capacity. These effects must be noticed if the significance of its work is to be suggested. It is, however, impossible to do more than notice them. The influences operating in the market are very complex, and its consideration as an organic thing, *i.e.* as a part of a living and developing industrial system, is quite beyond the scope of this book. Even as a dynamic thing its consideration must be very incomplete, for in its continuous process of readjustment to disturbing influences the organization sets up movements whose final consequences it is hardly possible to trace and express in any simple way until the machinery of economic analysis has been greatly improved. If, therefore, the argument is to be intelligible, it can do no more than touch on organic changes and consider dynamic movements when their effects are important and easily traced; it must in the main be confined to a problem rather static than dynamic in character; it must attempt to express the social economies which arise from the more important permanent forces entering into the composition of the market, those forces being regarded as in that equilibrium which they would attain if time were given them to work out their full effects without interruption.

CHAPTER II

THE MARKET IN RELATION TO MONEY AND CAPITAL

THE object of the preceding chapter was to place the organization with which this book is concerned in its general relations with the industrial system and to indicate the indirect economies to which it gives rise by its influence on the organic growth of the system. We have now to come to closer quarters with the subject in order to show what agencies and institutions are included in this organization; to express more definitely the nature of those direct economies which it produces, and with which alone we are henceforward concerned; and, finally, to establish leading ideas in the light of which these economies are to be examined.

This organization has already been roughly identified with the Money Market. It consists of a nucleus of specialized institutions, such as the banks, the market for negotiable securities, the bill brokers and the trust and finance companies, which form the inner market, or Money Market proper. But it extends beyond this centre forming an outer market which includes the work of the solicitor who arranges for the transfer of capital on mortgage, of the provincial broker who promotes the sale of new and old securities, of building societies which facilitate investment in houses, of the system of trade credit and of those less definite arrangements for facilitating the movement of capital which, as the market is extended outwards, become more and more closely bound up with the ordinary processes of trade and industry. The organization cannot, however, be accurately described by mere enumeration; it must be defined in terms of its typical services, and must be taken to be co-extensive with all the operations by means of which these services are performed.

What, then, are the essential services of the organization? In what way does it enable social resources to be adjusted more effectively to meet social needs? What is the nature of the social economy which it effects?

The answer to this question is a simple one. All the complex and highly specialized processes which form the organization of the market are tributary to two functions: they are an elaboration of two elementary services: the first is that of supplying a stock of money; the second is that of facilitating the transport of capital.

The English banks perform both services simultaneously: Issue houses, floating loans, transfer capital from the control of the public to that of the borrower, Accepting houses do similar work by guaranteeing the payment of bills and so reducing the risks of those who supply capital against this form of security; foreign exchange departments of banks provide means of payment between one country and another; the working of the Bank rate contributes to the making of payments by regulating the volume of the currency; the real meaning of every market operation is to be found in its effects in facilitating the making of payments, the transfer of capital, or in both together.

The market is defined in terms of these two services: every process devised to perform these services forms part of the market; conversely, the market includes only those processes by which these services are performed.

Although these two services are fundamentally different in nature, they are closely bound up together in practice, and are in consequence frequently confused with one another. If the subsequent argument of this book is to be intelligible it is essential that they should be distinguished as clearly as possible. It will be as well, therefore, to consider briefly the conditions in which the demand for these services arises and the nature of each. We may do so most conveniently by considering the case of a single individual, whom we take to be broadly representative of society as a whole.

In simple conditions where each individual devoted his energies directly and solely to the satisfaction of his own needs, the products that he required for his existence would emerge directly from his efforts into his own possession and he would experience no need for the means of acquiring products by way of exchange from other people; he would have no need for money. Further, as he would himself employ for his own purposes any implements and stores of raw material in his possession, he would not desire to lend them to other people, and he would consequently need no assistance in lending them with ease and security; he would have no need for any agency which facilitated the transport of capital. The need for the use of money and for facilities in transporting capital arises when people become interdependent; when means of communication become necessary in order to give scope to the growth of specialization.

In modern conditions this interdependence is very highly developed. In the typical case, each individual confines himself to the supply of some specialized service, and these separate services are co-ordinated into a stream of services which gives rise to the flow of products constituting the National Output. There follows an elaborate process of exchange, and this National Output reappears as the National Income or Dividend, the whole of it being divided among the parties producing it in proportion to the market value of the service supplied by each. Each party to production then, whether capitalist (or landlord), business manager, or labourer, obtains a title to a fraction of the total output, a title whose size is measured by the market value of the service which he contributes. This title represents a control over social resources and constitutes his real income. From these conditions there arise a demand for money and for facilities in transporting capital.

In these circumstances, in contrast with the simple conditions previously considered, each individual finds himself in possession, not of the various products he needs for his existence, but of a claim to a share in the general flow of products emerging in the hands of private owners. The value of his service gives him a right to a fraction of this flow, but not the means by which this right can readily be exercised. He needs some convenient means of administering his resources; some means of transferring portions of his property to other parties by way of payment for the various products he needs to acquire from them, by way of dues to the State, or by way of loan. He needs therefore to convert his title into some intermediate product which, being readily marketable, divisible, transferable and so on, serves as general purchasing power, and so may conveniently be employed as a means of payment. Many commodities possess these properties in greater or less degree; but the highest efficiency is attained when this intermediate product is produced in the specialized form of money, adapted by its supreme quality of general acceptability, and by its minor technical qualities, to be readily transferred from hand to hand as a means of payment.

While, in simple conditions, we have then an outflow of services and an inflow of products, in modern conditions we have an outflow of services exchanged into an inflow of money and an outflow of money re-exchanged into an inflow of products. It is with these inner streams of money, the intermediate mechanism, that we are now concerned. At their point of junction they will widen out into a pool; for the payments which each individual needs to make are irregular and uncertain, and he will consequently need to accumulate a part of his income and hold it in the form of a stock of money. The size of this stock, like that of his stock of other instruments, will depend on the amount of work to be done; it will depend primarily upon the volume and uncertainty of the payments he requires to make. Each individual, then, will forego part of the products he can command and invest a fraction of his real income in the form of a stock of money as a means of conveniently administering the resources which he controls. The amount of wealth which he holds in this particular form constitutes his individual demand for money; the sum of these individual demands constitutes the total demand for money.[1]

But there is a peculiarity in the relation between the total demand for money and the total supply which may be noticed even at this early stage, for its discussion brings out more clearly the nature of money and the manner in which it does its work. The total demand for money has been taken to be the sum of the quantities of goods which people forego in order to acquire their money stocks. This aggregate quantity of goods, then, purchases the total stock of money, the stock of counters in which all values are expressed; and this stock of counters does the money work of the community. Now, within wide limits, it is a matter of indifference to the community whether the denomination of the stock of counters so purchased is high or low, and whether the number of these counters is large or small. If the *denomination* of each counter is high, the value of the goods by which these counters were purchased is expressed in large figures; if the denomination is low, the value of these goods is expressed in small figures; the stock of counters does the same work in each case, but does it in different terms, that is to say, at a different level of prices. Exactly the same argument applies with regard to the *number* of counters comprising the total stock. If the total quantity of goods constituting Demand purchases a large number of counters, each item of goods exchanges for many counters, prices are high and each payment requires the use of many pieces of money. If, on the other hand, it purchases few counters, prices are low and each payment is carried through with the use of few pieces of money. More concretely, a stock of two hundred millions of sovereigns will carry through the total volume of payments at one price level, while a stock of one hundred millions will carry through the same volume of payments equally well at a price level one-half as high.

Owing, then, to the unique manner in which the money stock does its work—its operation as an intermediate stock continuously bought with goods and sold for goods—it differs in one important respect from other stocks of instruments employed by the community. Its peculiarity lies in this: that whether it is composed of many or few counters, of high or low denomination, it will do no more and no less than carry through the total volume of payments. But if the economic services yielded by the total stock are independent of the number and size of the units of which it is composed, it follows that the real value of the stock of money held by any country depends simply on the volume of payments to be effected; and that this value is measured by the quantity of goods which people are prepared to forego in order to effect those payments—in order to obtain the means which enable them to administer their resources conveniently.

But while the number and denomination of the pieces composing the total stock of money are properties which do not appreciably affect the services it performs, there are two properties which have an important influence on these services. In the first place, the form in which the pieces of money are supplied is by no means a matter of indifference. The pieces may be printed on metal in the form of gold, silver, bronze and nickel coins, or on paper in the form of notes, postal orders and cheques; each form possesses qualities which adapt it more or less perfectly to serve as a means of payment. If it is desirable that the community should be supplied with machines technically efficient in the production of goods, it is equally desirable that it should be supplied with the forms of money which have the highest technical efficiency as a means of effecting payments. The second property which money should possess is of greater importance still. While it is true, as already shown, that the value of the counter—of the unit of money—is of no appreciable consequence, it is also true, as will be shown later, that *changes* in the value of this unit are very important indeed, for during their course they cause an upward or downward movement of prices which is accompanied by considerable social disturbance. If this important property, stability of value of the unit of money, is to be attained, there must be a continuous adjustment of supply to changes in the volume of money work to be done.

This argument is intended to bring out the nature of the first service of the Money Market—that of the provision of a currency. The conclusion to which it leads is that the efficiency with which the market performs this service is to be judged by the degree of success which it attains in supplying a currency of the highest technical efficiency, and in regulating the supply of this currency in a manner which so far as possible maintains the unit of money at a stable value.

So far, the typical individual is seen as a party to production, who acquires a title to a fraction of the total flow of products by virtue of the service he contributes, and exercises this title by means of his stock of money. In order to distinguish the nature of his demand for the second service provided by the market we need to examine the manner in which he employs the resources at his disposal.

The control which he is entitled to exercise over the productive capacity of the community will be employed in the satisfaction of wants present and future; it will be devoted partly to purposes of consumption, partly to purposes of investment. In the former use, he directs social resources to supply him with products which are destroyed by current consumption; and he does so by means of the stream of money payments which represents that part of his income which he "spends." In the latter use, he either directs social resources to the construction of buildings and other products which yield up their satisfactions mainly in the future; or he transfers to other parties, in exchange for a rate of interest, a control over resources which he himself does not choose to exercise; and he does so by means of a stream of money payments which represents that part of his income which maintains, or adds to, his savings.

The total real resources annually devoted by people to these latter uses forms the annual supply of "free capital" in the strict sense of that term. In simple conditions, it would seem, the form in which this free capital appears is that of food; for only when a community is able with a part of its labour to supply food for the whole can it release the remainder from the need of self-maintenance, and direct it to the production of stores, buildings and, above all, the tools by which it may cumulatively increase its productive capacity. In modern conditions, it would seem, this free capital originates in the form of a stream of miscellaneous products drawn from the National Output, by means of which materials are obtained from abroad, and business energy, labour and plant are maintained during the period of production. The original stream of miscellaneous products, converted by exchange or by the productive energy it maintains into other forms, becomes less and less "free" as it is transformed by successive processes into its final shapes: fixed capital, claims against foreign countries, or materials such as munitions of war destined for immediate destruction. From this point of view, then, the annual stream of free capital, regarded in the concrete, has no distinctive *form*; for it includes not only food and raw materials which may be turned to almost any use, but also highly specialized products such as locomotives exported to the Argentine and exchanged for wheat. It has, however, a distinctive *quality*; for in order to be "free" it must be capable of conversion into buildings and plant, exportable goods, provision for national security and other forms, material and immaterial, to which the capital of the community is devoted. It is, perhaps, most easily conceived as the portion of the National Output which is not employed, by the individuals who control it, for purposes of current consumption; or, more simply, as that fraction of the total productive capacity of a country which is available for such purposes as the maintenance and extension of its business equipment, or for meeting the emergencies of the State.

As already noticed, portions of this surplus productive capacity are transferred by individuals who control it to other parties who offer a price, a rate of interest, for its use. This transfer is effected by means of the stock of money, in the form of a stream of general purchasing power, usually known as "free," or "floating," capital. But what is actually transferred is clearly not capital, but Command over Capital, and it is of some importance to emphasize the distinction; for Command over Capital may be readily expanded, and in times of active business is expanded, without any corresponding increase in the real capital which it controls.

In effecting this transfer, it is the object of the investor to convey his "capital" to those parties from whom he can obtain the highest net return. But to do so is a task which involves much trouble and skill. It requires an intimate knowledge not only of the business men and others who bid for the use of the capital, but also of the undertakings in which they are engaged; and the absence of this knowledge on the part of the ordinary investor constitutes a gap between the sources of the Supply and Demand of capital. There arises therefore a need for the services of expert intermediaries, such as the banks, the Issue houses and so on, who, being in touch on the one side with parties in possession of disposable capital, and on the other with parties anxious to employ it, will bridge the gap between the two and facilitate the movement of capital from one to the other. The second service of the market lies then in facilitating the movement of this stream of money, of Command over Capital, whereby the control over a part of the productive resources of society which is available for capital uses is transferred into the hands of those by whom it can most effectively be employed.

This, then, is the point of view from which we may regard money and capital. The supply of money in any community is a *stock*, essentially a stock of counters whose general acceptability enables them to serve as a control over resources in general and so form a convenient means of effecting payments. It is the business of the market to manufacture these counters in a convenient form, and to adjust their supply to the changing volume of payments so as to maintain the purchasing power of the unit of money as nearly as possible at a constant level. By so doing, it facilitates the dispatch of business transactions, thereby increasing the efficiency of production, and adding to the size of the National Dividend. On the other hand, the annual supply of capital in any community is a *flow*; it is that part of the productive capacity of the community which can be spared during the year from the task of satisfying immediate wants, and devoted to purposes such as the maintenance and extension of industrial plant and machinery. A part of this annual flow of free resources is applied directly by its owners; the remainder is transferred into the hands of other parties, by way of loan and so on, through the agency of a stream of money, of control over resources, of Command over Capital, or, more loosely, capital. It is the business of the market to facilitate the movement of this stream of Command over Capital to the points of highest yield, just as a railway facilitates the movement of goods to the points of highest demand. By so doing, it enables a control over resources to pass into the hands of those who can employ them most effectively, thereby increasing productive capacity and swelling the National Dividend.

CHAPTER III

THE MARKET IN RELATION TO CREDIT

THE work of the market in each of the two services which have just been discussed is influenced in a very important way by what is vaguely known as "credit." The part played by credit in the market organization cannot be considered at all fully at the present stage. Its importance lies partly in the economies arising from what may vaguely be described as the normal level of credit; partly in the influence which changes in this level exercise on the activity of the market; at one time greatly facilitating its work and causing an undue expansion in its operations; at another, checking its work and unduly contracting its operations; in either case, causing a disturbance in the adjustment of economic means to ends. At the moment we are concerned only to establish as clearly as possible the nature of credit and of the normal economies to which it gives rise; in the following chapter the matter will be carried a stage further and some preliminary account given of its effects in alternately stimulating and depressing the market.

Jevons was so impressed by the ambiguities of the term "value" that he thought the expression should be eliminated from the text-books. He might with equal force have advocated the abolition of the term "credit." Credit is used in many senses and is often so used in the same context, with the result that a vague impression is often given of something being created out of nothing, and an almost mystical atmosphere is thrown over operations in themselves quite simple and concrete. If, for example, one is told that a house is built "on credit," it is only too easy to interpret the term credit as meaning at the same time both the capital employed in building the house and the business reputation which enabled the builder to borrow the capital necessary for the purpose. Unless a definite mental effort is made to separate these inconsistent meanings, a vague idea is left in the mind that, by some obscure use of credit, bricks and mortar have been produced from thin air, when in point of fact all that credit has done has been to enable capital to be transferred from the hands of one party, who is thereby deprived of its use, into the hands of another party who has employed it to build a house.

It seems to be quite impossible to find any definition of the term *which covers all the uses in which it is actually employed*, but this is hardly to be expected in view of the inconsistent meanings which it receives. Essentially credit seems to be *a condition which enables a person to extend his control, as distinct from his ownership, of resources.* A short phrase, *power to borrow*,[1] though not perfectly accurate, is more convenient in use; thus a man's credit is high when his power to borrow is good; a bank grants credit when it grants the power to borrow and a credit currency is a currency based on the power to borrow. The point to notice especially is that credit cannot increase the supply of resources at the disposal of the community; its function lies in facilitating the transfer of these resources from one party to another. Credit is a *condition*, a condition which may be expressed on the one side as the power of business men and others to borrow from capitalists and on the other as the confidence on the part of the investor in the person to whom he entrusts his capital. The confidence of the investor and the power to borrow of the business man are two aspects of the same conditon, a condition which enables capital to move easily from one to the other.

The statement does not, however, indicate clearly the economies which credit effects in the work of the market. In order that this may be done it is necessary to examine separately its influence first on the work of supplying money, secondly on that of transporting capital.

The total stock of purchasing power may be conceived as consisting of three groups, each with its own characteristics, arranged like Chinese boxes, the one within the other. The central group may be taken to consist only of gold and be known as standard money. The second and larger group, which may be described as currency, is composed mainly of forms of money which depend on credit and are passed from hand to hand as a means of payment; it includes the subsidiary coinage which consists of titles to gold, notes which are promises to pay, and also bank deposits which are evidences of promises to pay and are transferred from one party to another by means of cheques. The third and largest group must be known as purchasing power and be taken to include not only currency but also all other means of purchase, the most conspicuous of which are bills of exchange and the simple book entries which record a power to purchase granted, for example, by wholesale houses to retailers and by retailers to consumers. These three terms, standard money, currency and purchasing power, will henceforward be used in the sense just defined, while the term " money " will be employed when no particular accuracy is required by the context.

The distinction between these various forms of money, in itself, brings out the normal influence of credit on the stock of purchasing power. Credit, employed in this way, gives rise to an important economy; in effect it multiplies the stock of standard money into a much larger stock of general purchasing power in the form of promises to pay, and, by so doing, enables the community to substitute for gold a means of payment which is perhaps more economical, certainly more efficient. It should be noticed that these economies due to the substitution of paper for gold arise from the function of credit in extending the power to borrow. It may also be noticed that in consequence of this substitution the volume of purchasing power depends on the state of credit, tending to expand when credit is good and contract when credit is bad; but this point is outside the normal economies which at the moment are under discussion and must be carried forward for consideration later.

The economy effected by credit in the transport of capital though produced by the same method is different in character. It was noticed that between the investor and the party who bids for the use of his capital there lies a gap due to lack of knowledge. This gap is partly bridged with the assistance of the Money Market. But even with this assistance the power of any business venture to obtain the capital it requires must be determined largely not so much by its actual earning capacity as by the estimate which the investor forms of the business integrity and ability of the parties in charge of the venture. In other words, the power of the venture to obtain the capital it needs depends very largely upon its credit, upon the confidence which its management inspires in the mind of the investor. The public recognition of business integrity and ability which is the basis of credit is then a very important means of promoting the free flow of capital in the direction required by the public interest, namely, in the direction of its highest net yield. The economy effected by credit in relation to the transport of capital is therefore very great, and is measured by its effects in increasing the productivity of capital by enabling it to move readily to those points at which it yields the highest net return.

Credit, then, by bringing borrower and lender into closer business contact, introduces these two important, normal economies. In the first place, it enables Governments and banks—to take the most conspicuous examples—to borrow from the public. These borrowings recorded in the form of notes and deposits are the means by which the stock of gold is multiplied into a larger and more efficient stock of purchasing power. In the second place, it enables the control over those resources which are not devoted to purposes of consumption to be more readily transferred to the points at which they can be most effectively employed.

The higher the level at which credit is sustained in any community the larger will these economies be. Inasmuch, therefore, as credit is a means by which the efficiency of the organization of the Money Market is increased it must be reckoned as a part of the immaterial capital of the country. In international relations the advantage to any State of a high reputation is evident enough; it is shown in the reduced costs at which its market can draw supplies of capital from foreign countries, and may be measured, in the case of a country borrowing largely abroad, in terms of millions of pounds per annum. It is, however, with the internal advantages that we are principally concerned.

A part of the immaterial capital of each country consists, then, in the normal level of credit or, what is the same thing, in the normal level of confidence on the part of capitalists in the business integrity and ability of those who bid for the use of their capital. The yield of this immaterial capital is expressed partly in the form of the lower gold reserves which the country needs to hold against its paper currency, partly in the more effective application of the resources of which it disposes. It would be absurd to attempt any detailed analysis of the influences which determine the extent to which any country is able to avail herself of these economies; but it may be worth while to notice some of these economies which show themselves directly in their effects on the Money Market.

National character has clearly an important influence on the level of credit, and consequently on the development of an economical currency. Leoni Levi,[2] in 1880, showed the effects resulting from the difference between the "phlegmatic temperament of the Scotch and English, and the impulsive disposition of the Irish." "The Irish," he says, "are constantly alternating between the extremes of confidence and distrust. At one time they will avail themselves in a most inconsiderate manner of any facility of credit. At another, and immediately as credit is in any degree checked, they fall into a total want of confidence. In Scotland a sound public opinion respecting the currencies operates rather more efficiently than any bank restriction Act in economizing the use of gold. A person who asks for gold in payment of a note acts, in the eyes of the community, in a most unpatriotic manner, and contrary to the interests of the country. In Ireland the great body of the peasantry have upon the slightest rumour a desire to possess themselves of gold in preference to paper."

The possibility of an economical and efficient credit currency necessarily lies in sustained confidence. This depends not only on the character of the people, but also on the stability of its social and political institutions. In England political security and the growth of strong, old-established banks of high reputation have made possible the development of a currency which in pre-war days was, perhaps, the most efficient and, so far as the size of its gold reserve was concerned, almost certainly the most economical in the world.[3] In the U.S.A. a similar development has been hampered by exceptional currency and banking legislation, but is now in full progress. In Germany and France, on the other hand, where the threat of war has always been more immediate, both the forms of currency—notes and metal—and the still extensive habit of holding reserves of this currency at home, are evidence of a lower level of confidence and of its cost.

It seems tolerably certain, however, that the general level of credit is of far greater national importance through its influence in enabling capital to move easily to its most profitable employments either at home or abroad. Imperfect confidence on the part of the small capitalist, and imperfect knowledge on the part of the banks, seriously hamper the small Indian entrepreneur in obtaining control over the capital he requires to expand his business. "The wealth actually possessed does a very small amount of work owing to its inactivity. . . . The difficulty of raising capital for industries is mainly the measure, even in India, not of the insufficiency or inaccessibility of money, but of the opinion which its possessors hold of the industrial propositions put before them."[4]

A writer in the *Encyclopædia Britannica*,[5] speaking of the "deep-rooted conservatism and caution of the French people in money matters," says: "It is true that they are liable to occasional outbursts of imprudence such as led to the loss of great sums in the Panama Canal Coy.; but, as a rule, it is difficult to induce the average Frenchman to place his money in anything which he does not think a safe interest-yielding security under French law; he almost always wants to invest and not to speculate." The English are less cautious, and their investments have been less subject to political influence; their capital has been devoted less exclusively to first-class international securities, and has moved more readily into foreign railways and industrial undertakings of a more risky nature.

In Germany the vigour and enterprise of her business men, together with the comparative poverty of the country, has made the market primarily a domestic organization. The success with which her available resources have been applied to the development of industry and trade seems to have been largely due to an exceptionally efficient system of intelligence organized by the banks. This system has given them an intimate knowledge of business men and their undertakings at home and abroad, by means of which the "credit" of these business men becomes an effective means of obtaining the capital required to give scope to their energies.

CHAPTER IV

GENERAL VIEW OF THE MARKET

THE purpose of the preceding two chapters was to establish the leading ideas which are to be employed in the later treatment of the subject-matter. The object now is to recapitulate, in order to bring those ideas more closely together; to carry them a little further in order to present a preliminary view of the work of the market as a whole; and, finally, to indicate the order in which the subject is to be dealt with in the following chapters.

It was noticed that the organization whose work is to be considered includes not only the specialized institutions forming the Money Market proper, but the whole of the varied and indefinite arrangements concerned in the supply of two services: the manufacture of money and the transport of capital.

This organization may be conceived as lying between two groups: the one, the group of capitalists, *i.e.* of people with disposable resources; the other, the group of business men and other parties who apply these resources in their various uses. The market supplies the stock of money by means of which these resources are administered and at the same time supplies facilities by which these resources pass readily from the possession of one group into the control of the other. Between these groups Command over Capital is transferred in a continuous stream.

Credit, so long as it is at what may loosely be called its normal level, serves simply to facilitate the work of the market. It enables it, on the one hand, to multiply the central gold reserve into an appropriate quantity of convenient forms of purchasing power. It enables it, on the other, to facilitate the movement of resources from one party to another; if a larger fraction of the total flow of social resources is devoted by capitalists to investment purposes, that flow appears on the market as an increased supply of capital, is transferred to the parties who offer a price for its use and results, without disturbance, in the productive powers of society being applied more largely to produce such durable things as factories and machinery, and less to the supply of consumables; conversely, if people become less thrifty, less capital is carried by the market into the hands of business men, purchasing power is applied to direct a larger fraction of the total stream of resources to the production of consumables and a smaller fraction to increasing the stock of fixed plant and other forms of capital.

But the important influence exerted by credit on the efficient working of these processes must be set against the great disturbances which are introduced by changes in its general level. Credit was defined as a condition which may be expressed on the one hand as confidence on the part of the investor, and on the other as a power to borrow; a condition which itself depends on another and more general one, namely, the general level of confidence on the part of business men in the future outlook. The level of confidence in general includes therefore the level of confidence between the particular class of creditors and debtors, *i.e.* the level of credit; and a change of confidence, by affecting credit, affects also the work done by credit in facilitating the two services performed by the market.

If confidence in the business outlook increases, investors become more willing to lend, business men are both more eager and more able to borrow, and capital flows more readily from the one to the other. But this is not all; for the stock of purchasing power, being also dependent on the level of credit, is also affected.

It is true that an increase of loans does not necessarily result in an increased supply of money, for a loan may be merely a transfer of purchasing power; even so, however, the transfer may result in the money being more actively employed. But a more important point is the fact that an increase of certain kinds of loans—in particular bank advances and trade credit—necessarily results in the creation of new purchasing power and not merely in its transfer from one party to another.

Hence a general increase in loans involves an expansion in the total volume of purchasing power and an increase in the stream of Command over Capital passing into the hands of business men; an increase independent of the stream of raw materials and other forms of real capital which are available for their use. The competition of increased purchasing power for the limited supply of real resources naturally leads to a rise in prices; and rising prices, by quickening the anticipation of profitable sales, reinforce the general confidence and so lead cumulatively to a further expansion of credit. At such times the market is thrown into a state of abnormal activity: bank loans expand, new companies are readily floated, operations are large and profitable. With declining confidence comes the converse train of effects: contracting credit, a smaller volume of purchasing power, lower prices and a market unduly depressed and inactive.

In much the same way, therefore, as a chemical reaction proceeds regularly while the temperature of the medium in which it is immersed remains constant, and as its action quickens when the temperature rises and slackens when it falls, so the operations of the Money Market, immersed as it were in a medium of credit, proceed regularly when the level of credit is normal, quicken as this level rises and slacken when it falls.

These then are the main ideas with which a preliminary conception of the market may be formed : the manufacture of money ; the transport of capital ; the normal influence of credit in facilitating these operations ; the effect of changes in the level of credit in alternately quickening the activity of the market and plunging it into depression.

The organization in which money, capital and credit work in their complicated ways to produce the phenomena of the Money Market has to be examined in the following pages with the object of tracing the social economies to which its work gives rise. The natural order of the analysis would seem to be to deal first with the normal work of the market and then with its work during the periods when it is unduly active or depressed ; but it seems impossible to follow this order completely without breaking up the subject-matter inconveniently and introducing a good deal of tiresome repetition. The actual order adopted will then be somewhat as follows. In the first place, a fuller account must be given of the economies arising from the supply of the various forms of purchasing power, and the social evils which result from arbitrary variations in supply ; the standard by which this part of the work of the market is judged being the technical efficiency of the means of payment which it provides and the success with which the supply is adjusted to the volume of work to be done. Next will come an examination of the costs of production of capital, the nature of the economies arising from its use and the work done by the market in lowering its supply price ; this work being measured by its effects in lowering the cost at which capital is carried to the points where its productivity is highest. The work of the market having been outlined as a whole, a closer examination must be made of the more important parts of its organization, in particular the banks and the market for negotiable securities. In the course of this examination it will not be possible to avoid considerable repetition ; further, the length at which the different parts of the subject-matter are discussed will be adjusted rather to their difficulty than to their importance.

PART II.—OUTLINE OF THE THEORY OF MONEY

CHAPTER V

MONEY—THE QUANTITY THEORY.

THE value of a unit of money, like the value of a unit of any other thing, is governed by influences operating through supply and demand, and is governed solely by influences operating through these channels. The exchange value of a yard of cloth tends to fall with every increase in the supply of that cloth and to rise with every increase in its demand ; similarly, the exchange value of the piece of stamped bullion known as the sovereign tends to fall with any increase in the supply of sovereigns or their substitutes and to rise with any increase in demand ; in neither case can exchange value be affected except through the channels of demand and supply.

This is saying no more than that the general theory of value may be applied to explain the purchasing power of the sovereign in exactly the same way as it may be applied to explain the exchange value of everyday commodities, the rate of interest, or the level of wages. This general statement is not in dispute, but it is of some importance to lay emphasis upon it. For the theory of money contains certain minor peculiarities ; and there is a tendency, if not actually to rest the theory on these peculiarities, at any rate to give them rather undue prominence, with the result that the theory comes to be regarded as a thing *sui generis*, distinct from, instead of a part of, the general theory of value.

The first of these peculiarities lies in the fact that, with a careful definition of terms, it is possible not merely to say that a given change in demand or supply will cause the value of the sovereign to rise or fall, but to lay down a definite numerical relation between these two changes, *e.g.* that if supply is doubled, value is halved. It is this feature to which the Quantity theory gives such great prominence. The second peculiarity lies in the fact that the causes affecting the value of money are more complex and obscure than those governing the value of ordinary commodities. This feature strengthens the tendency to regard the theory of money as a thing apart; for it makes it convenient to express the theory in a special form—that of a mathematical formula which serves as a vice (as Dr. Marshall expresses it), holding together in a compact form the set of ideas required to deal with the theory.

For a brief statement of the Quantity theory no elaborate formula is required. It will be sufficient to use a very simple and quite general expression—one which is applicable not only to money but to any kind of commodity:

$$P=\frac{D}{S}$$

If this equation is applied to express the value of cloth or copper, P = the price of the yard or the ton; D, the amount of money exchanged against cloth or copper; S, the amount of the commodity exchanged against money. If, as now, the equation is applied to express the value of money, P = the purchasing power, or exchange value, of the sovereign. But the meanings to be given to S, the supply of money, and D, the demand for money, are less obvious; they must be derived from a general conception of the total volume of exchanges.

During the course of a period of time, say a year, there takes place within any country a definite but unknown total of purchases or sales. This total may be mentally separated into two parts: the one being the sum of all the individual amounts of money exchanged against goods (including services); the other being the sum of all the individual amounts of goods exchanged against money. We have, then, a conception of the total purchases or sales effected during the year, in the simple form of an aggregate of money, S, exchanged against an aggregate of goods, D. In everyday thought and language, S, the aggregate of money, would naturally be regarded as forming the demand for goods. The simple converse leads us to regard D, the aggregate of goods, as forming the demand for money; and it is so regarded for the purposes of this theory. There is scope for a good deal of discussion in defining exactly what these aggregates S and D should be taken to include, and for elaborating the equation in order to show the various elements of which they are composed. But for present purposes this need not be carried very far.

S would, perhaps, usually be taken to include coin and banknotes in actual circulation, but not that part which was "hoarded"; it would include also all deposits subject to cheque, without distinguishing between that part which was actively employed in the purchase of goods and that part held as a reserve against contingencies. It would exclude purchasing power obtained by the creation of commercial bills of exchange and book debts; for these, separate allowance must be made. Further allowance must be made for money transferred in the form of gifts, taxes and other payments for which nothing tangible is received in exchange. The aggregate of money exchanged against goods during the year being so defined, the next step is to recognize that each piece of money may be so exchanged several times in the course of a single year; each piece has a "rapidity of circulation." It is convenient to take account of this by slightly elaborating the formula and substituting for S, $n \times r$, where n = the number of units of money and r = their average rapidity of circulation.

D does not, of course, include either those goods which are not exchanged or those which are exchanged directly against other goods; it includes only that aggregate which is exchanged against money.

This aggregate we may call T, though it is not a total in quite the usual sense of the term; for the units of which it is composed —the quantities of iron, cotton, wheat, human services and so on—are not homogeneous and cannot be added together. It must be conceived as a vast collection of different quantities of different things, which can be expressed only in the form of an immense list. It is clear that each kind of thing entering into this total may be exchanged once or many times; that goods, like money, have a certain average "rapidity of circulation." Further, the average number of times these goods are exchanged may alter considerably; it rises, for example, with the growth of public joint-stock companies whose shares are continuously sold and resold on the Stock Exchanges; and it falls when, in time of war, many goods which would normally pass through a series of hands are supplied by the manufacturer direct to the Government. This "rapidity of circulation" of goods may, like that of money, be expressed separately in the formula, or it may be allowed for by reckoning the yard of cloth which is sold four times as entering into T, not as one yard but as four. It is, however, not usual to express this rapidity of circulation separately, and we need not do so now. The equation may, then, be written down in the simple form:

$$P = \frac{T}{n \times r}$$

It cannot be maintained that this formula leads to any very clear conception of P, the value or purchasing power of the sovereign.

T has been regarded as the aggregate of the items of a prodigious invoice, each item being a separate statement of the total quantity of some one kind of goods exchanged against money during the course of the year. The value of P must then be conceived as an aggregate composed of a minute fraction (the $\frac{1}{nr}$th) of each of these items; or, more concretely, as this aggregate of small quantities compounded into a "composite commodity." It is a conception of the purchasing power of the sovereign from the point of view of a community regarded as a single person spending the whole of its money in the purchase of the whole of the commodities sold. This conception serves well enough in considering the simpler changes in the value of the sovereign.

It is clear that if the sole change occurring is that *n* or *r* is doubled or halved, then the value of P is halved or doubled, that is to say, the size of the composite commodity purchasable for a sovereign is one half, or twice, as large as before. The formula, therefore, brings out clearly the main peculiarity in the causes determining the value of money: namely, that the value of the unit varies inversely with changes in the total quantity. The reason for this peculiarity has been discussed on pp. 9 and 10.

Further, if T is doubled, in the sense that the quantity of each of the things of which it is composed is doubled, the value of P is also doubled; for the sovereign will purchase a composite commodity of exactly the same constitution as before and of double the size. But in practice, of course, the changes that occur on the side of T are not so simple. What actually happens is that changes are simultaneously occurring in opposite directions; some things are increasing while others are diminishing in quantity, with the result that the constitution of the composite commodity —the proportions of its ingredients—alters. Even from the point of view of society as a whole it may be impossible in such cases to say whether, as a result of the change, the purchasing power of the sovereign has risen or fallen; it will buy more of some things, but it will buy less of others. And the matter becomes more complicated when we take account of the fact that individuals spend their money on the various kinds of goods in proportions determined by their individual tastes; so that a change of the kind considered may raise the purchasing power of the sovereign to some while lowering it to others.

In practice, of course, a definite if somewhat arbitrary solution is found by the use of index numbers. For the comprehensive composite commodity with which we have been dealing there is substituted a simpler composite commodity made up of a relatively small number of representative goods. The constitution of this simpler composite commodity, that is to say, the ingredients of which it is composed, is adapted to the nature of the consumption of the particular economic group to which it relates. And changes in the size of the composite commodity purchasable for a sovereign, or what is the same thing, changes in the price of this composite commodity, are taken as the index showing the rise or fall in the value of the sovereign in the estimation of the particular economic group concerned. The manner in which the value of the sovereign alters in response to such causes as a change in tastes or in the nature of commodities produced, and the precise method by which these changes are measured need not concern us. The considerations which have been touched on are intended only to establish two simple ideas: the one, that a tolerably clear conception of the purchasing power of the sovereign may be formed in terms of the size of a composite commodity; the other, that an accurate conception of changes in this purchasing power may at times be impossible, and must be left to the more or less arbitrary decision of an index number.

The value of the unit of money may be expressed in terms of the fraction of a composite commodity for which a sovereign will exchange. It may also be expressed in terms of the number of sovereigns which will exchange for that composite commodity. In other words, P, the purchasing power of the sovereign, and $\frac{1}{P}$, the general level of prices, are modes of expressing the same idea; the one expression is the reciprocal of the other. That being so, the causes determining the general price level may be expressed in terms of the causes determining the purchasing power of the sovereign, and those again in terms of the Supply and Demand of money, or T and $n \times r$. To put the matter more concretely: no change can occur in the general price level except as a result of causes affecting the quantity or rapidity of circulation of goods (including services), or the quantity or rapidity of circulation of money. For example, a rise in wage rates, *i.e.* a rise in the *price* and not in the *quantity* of certain of the things offered against money, cannot in itself alter the general price level; though, of course, such a change will be followed by a rise in the price level if it leads to reduced output or if it leads, as during the war, to an expansion in the supply of money.

The Quantity theory of money has been so long a centre of controversy that it would be absurd to attempt any detailed criticism within the limits of this chapter; nevertheless, one or two general considerations may be touched upon.

It will be noticed that much of the apparent simplicity which makes the theory so attractive to the mind disappears on closer acquaintance: special allowances must be made for money payments against which no goods are received, for money temporarily hoarded and so on. However, the accuracy of the theory, when the terms in which it is expressed are properly interpreted, can now hardly be disputed; the question is one rather of the convenience which it affords in the statement and solution of monetary problems.

In touching upon that question it must be noticed that the theory gives great prominence to the simple numerical relation connecting changes in supply and demand with consequent changes in the value of the unit of money, the sovereign. By so doing it brings out with especial clearness the consideration that the amount of work done by the total stock of money is independent of the size of that stock: it shows, for example, that if, without any other change, the world's stock of gold money were doubled, the additional gold would add nothing to the efficiency of the monetary system; the doubled stock would carry through the same amount of money work as before at a price level twice as high; the resources employed in the production of the additional gold so used would have added nothing to the well-being of society. It is an advantage of the theory that it enables this simple numerical relation to be so clearly seen; but the advantage is gained at the cost of attracting attention to that which is exceptional in the causes governing the value of money, rather than to that which is common in governing alike the value of money and other things. It seems to be true that for the imperfect solution of most practical money problems (which is all that is attainable), it is sufficient to know that an increase or decrease in the supply of money tends to cause a fall or a rise in the value of the sovereign; the fact that there is a tendency for this consequent change to be proportionate to the change in supply seems to be a matter of minor importance, for it is so intermingled with other tendencies that its existence is beyond the strength of statistics to detect.

Further, this theory deals only with the relations between the total demand for money and its total supply. It does not construct this total demand from the individual demands on which it rests; and, indeed, it throws little or no light on the nature of this individual demand or the manner in which it is satisfied. On the grounds, therefore, both of convenience and completeness the theory is supplemented in the following chapters by a statement based on the evidence given by Dr. Marshall before the Royal Commission of 1888, on Recent Changes in the relative values of the Precious Metals.

As a preliminary to further discussion, it is convenient to notice the different aspects in which money may be regarded. In dealing with the Quantity theory, it is considered primarily as a quantity of counters, in terms of which the values of all other goods are *measured*; *when discussing the* individual demand for money, it is regarded as a stock of instruments, like trade tools, yielding specific services; and later, when dealing with banking, it is conceived rather as a title to resources in general, or as a quantity of Command over Capital.

CHAPTER VI

THE DEMAND FOR MONEY

THE statement that money is a means of exchange is not quite complete. It is true that money is the means by which each person is enabled more easily to exchange his own product for the products of other people, and it is true that this is much the most important part of the work which it does; but over and above this it is the means of effecting payments which can hardly be described as exchanges; for example, allowances made by father to son, the payment of rates and taxes and, perhaps, certain kinds of loans. It seems therefore to be more accurate and more convenient to describe money as a means of effecting payments.

In a modern community each person with resources at his disposal needs some means by which he can employ these resources in order to obtain goods from other parties, to pay his dues to the State and to meet more uncertain demands to which he may be exposed. The resources at his disposal are not usually in a form in which they can effectively be employed for these purposes; a steel manufacturer cannot readily pay his rates with steel billets or a workman buy bread with personal services. Each therefore will find it convenient to hold a part of his resources in the form of a stock of something which, being generally acceptable and easily transferable, serves as general purchasing power and may be readily passed from hand to hand as a means of making payments.

He will of course have to forego interest upon the resources which he invests in this particular form of a stock of money, but he will obtain instead facilities for making payments, which may be expressed as a return of convenience and security. His stock yields him an income of convenience, for it reduces the cost and trouble of effecting his current payments; and it yields him an income of security, for it reduces his risks of not being able readily to make payments arising from contingencies which he cannot fully foresee. The investment of resources in the form of a stock of money which facilitates the making of payments is then in no way peculiar; it corresponds to the investment by a merchant in the office furniture which facilitates the dispatch of business, to the investment of the farmer in agricultural implements which facilitate the cultivation of his land, and indeed to investment generally.

Such being the *nature* of an individual's demand for money, we have now to consider the causes governing its *amount*. In order to do so, let us first state the general principle on which an individual distributes his resources among their various uses, and then pass on to consider the causes determining the amount which he invests in this particular use—money.

This general principle is familiar enough. As a person extends the application of resources in any particular use, the yield from each successive unit of resources so applied satisfies a less and less urgent need. Accordingly he presses their employment in each use up to that point where in his judgment the marginal yield is equal all round; for if this yield differed as between any two uses it would pay him to transfer resources from one to the other. Resources devoted to consumption supply an income of immediate satisfaction; those held as a stock of currency yield a return of convenience and security; those devoted to investment in the narrower sense of the term yield a return in the form of interest. In so far therefore as his judgment gives effect to his self-interest, the quantity of resources which he holds in the form of money will be such that the unit of resources which is just and only just worth while holding in this form yields him a return of convenience and security equal to the yield of satisfaction derived from the marginal unit spent on consumables, and equal also to the net rate of interest.

This distinction between the yield of convenience and security brings out the consideration that the stock of money held by a business man serves not only to effect his current payments but also as a first line of defence against the uncertain events of the future. This first line is supported by his power to borrow from his banker and perhaps by a holding of Stock Exchange securities. It may be noticed as a corollary that the banks and the Stock Exchange, by increasing the facilities for borrowing and for selling securities, increase the power of business men to make payments in times of individual necessity; in effect they insure him in part against his individual financial emergencies, and so tend directly to reduce the stock of money which he needs to hold.

If we arrange a business man's investments in order of their marketability, we may regard his resources as distributed among a series of uses ranging from his stock of the supremely acceptable thing, money, up to his investments in the permanent plant from which he draws his main money income. This arrangement conveniently illustrates the essential similarity between the distribution of resources by a business man and the distribution effected by a bank, where the two main considerations, the need to meet current and contingent demands and the need to earn a profit, are shown in clearer contrast. In order to meet current and contingent payments over the counter or through the Clearing House a banker holds the till money and the balance at the Bank of England which (in normal times) yield him only an income of convenience and security. His second and third lines of defence are his short loans and his holdings of Stock Exchange securities, readily marketable and yielding only a low rate of interest. The rest of his resources, like those of the business man, are employed in the more profitable uses from which they cannot readily be withdrawn. So, too, with the Bank of England. The stock which yields an income of convenience and security is in this case the gold reserve, for gold is the only thing which is generally acceptable as a means of effecting the payments which it may be called upon to make. Behind this, as with the other banks, are ranged in order its short loans, its holdings of securities and finally the more permanent uses in which its resources are engaged.

Given this general principle on which business men and bankers alike allocate their resources among competing uses, let us turn to consider the specific causes determining the quantity of resources held in the form of money. The demand of an individual for consumables, machinery or Stock Exchange securities is the amount of resources which he devotes to the purchase of these things; similarly, his demand for money may be stated as the amount of resources which he devotes to this particular use. On what does the volume of this particular demand depend? The answer, already given, is that it depends on the volume of his current and contingent payments; but it seems to be of some importance to investigate this a little more closely.

It is clear enough that the size of the money stock held by a business man depends mainly on the volume of his current transactions, but it is not quite so obvious that it depends also on the degree of uncertainty in his business situation.

Contrast the position of two merchant firms, let us say the "shipper" of woollen goods, who buys from the home manufacturer only in response to foreign orders, and the "merchant" who buys similar goods in anticipation of foreign demands; they may both need to hold the same volume of money to carry through their current transactions, but the latter firm will need to hold a larger stock of money (or other readily available resources) because of the greater uncertainty in the incidence of his receipts and payments. Again, two banks may need about the same amount of till money and reserve at the Bank of England to meet the current demands made over the counter or through the Clearing House; but if, as we may suppose, the one bank differs from the other in the circumstance that its deposits are composed predominantly of a few large balances lodged by foreign bankers, it must hold a larger reserve against contingencies; its stock of money will need to bear a larger proportion to its total payments than that of its rival.

Even in normal circumstances, therefore, the size of the stock of money held by a business man depends partly on the volume of his current transactions, partly on his individual business outlook. The distinction is, perhaps, even more marked when this outlook changes. For when the general outlook is improving, rising confidence inevitably encourages business men to invest their resources more closely—to be less reluctant to "lock up their capital"; just as it encourages the banks to reduce the proportionate amount of their "cash" by expanding their loans. On the other hand, when confidence is declining, the amount of money which a business man requires to carry through his current transactions may be no greater than before; nevertheless, his apprehension of the demands that may be made on him is likely to cause a great increase in his demand for money as a reserve against contingencies. If apprehension becomes general, there may follow a condition of crisis accompanied by a great and urgent demand for money, not so much to meet current payments as to provide against prospective payments whose volume is unknown.

These considerations lead to a definition of the demand for money rather different from (though not inconsistent with) that laid down by the Quantity theory. In that theory the demand for money during the year is taken to be the aggregate of goods (and services) exchanged against money during that period. If we add to this aggregate of goods, the total of allowances, dues to the State and other similar transfers for which money is employed, we obtain the total volume of payments. Can this total, the volume of payments to be effected, be properly regarded as forming the demand for money? This question must be answered in the light of the considerations which have just been noticed.

It seems undeniable that the volume of payments is the sole source of the demand for money; for the essential function of money is to serve as a means by which payments are facilitated. In order to carry through his payments quickly and conveniently each person holds a part of his resources in the form of a stock of money. The size of that part of this stock which he holds to carry through current transactions depends directly upon the volume of his payments; as the volume of his business transactions rises or falls, so he makes large or smaller provision of the means by which these transactions are carried through. But the size of that part of this stock which he holds as a first line of defence against emergencies depends less directly upon the volume of his payments; it depends upon his *estimate* of contingent payments, and consequently varies with his state of mind, or, more concretely, with the business outlook. If he is apprehensive, his demand for money rises, and prices tend to fall as a result of the withdrawal of money from active circulation into reserve; if he is confident, his demand for money for the purpose of a reserve falls, and money is released for active circulation, with a consequent tendency to a rise of prices. It seems reasonable, therefore, to regard this latter part of the aggregate money stock as a reserve whose size is regulated largely by the general level of confidence—a reservoir from which money flows into active circulation when times are good, and into which money flows from active circulation when times are bad. This ebb and flow of money would, perhaps, usually be regarded as changes in the volume of hoarding; but the characteristic of a hoard is its uselessness, and the characteristic of a reserve lies in the fact that it does money work, though of a rather different kind from that of money in active circulation. Accordingly it seems that theory is brought into closer relation with the facts when we recognize that part of the demand for money arises from the need to make provision against contingent payments, and that this part of the demand fluctuates in response to changes in the general condition of confidence in some measure independently of the volume of payments.

The discussion leaves a choice of two forms in which the demand for money may be expressed. Just as the demand for agricultural implements is derived from their yield of services in cultivation, and is represented as the quantity of resources devoted to this use, so the demand for money, derived from its yield of convenience and security in effecting payments, may be represented as the quantity of resources held in the form of a money stock; this conception is completely in harmony with the preceding discussion, and is apparently that adopted by Dr. Marshall when giving his evidence before the Gold and Silver Commission. Alternatively we may go a step farther back and regard the demand for money as represented by the volume of payments to be effected; interpreting this as the estimate of the volume of payments, present and prospective; this view has the advantage of being more easily realized and more closely in touch with the origin of the demand. The choice between these two forms of expression is one to be determined on grounds of convenience.

Implicit in this discussion are three considerations. First, that the individual's demand for money is expressed and satisfied in just the same way as his demand for ordinary commodities; he distributes his resources in such a way as to satisfy each need down to the same level of urgency. Secondly, that the sum of these individual demands constitutes the total demand for money. Finally, that this total demand contains a peculiarity found only in the theory of money; the nature of this peculiarity and its cause have been discussed on pp. 9–10.

The question now arises—What are the specific properties demanded in the thing which is to serve as money?

These properties have already been indicated in part. It is clear that the first and all-important characteristic of money must be general acceptability; it is this characteristic which gives it its general purchasing power and consequently enables it to serve as an effective means of making payments. Logically, perhaps, this essential property of money may be held to include the minor qualities on which the technical efficiency depends; for it can hardly be generally acceptable in the fullest sense of the term unless it has those properties of portability, divisibility, durability and so on which enable it to be readily transferred in small or large amounts from one party to another.

A discussion of these qualities would be of little interest; in any case it would be hardly practicable in any short space, for the kinds of payments to be made differ widely, and each kind sets up a demand for a form of currency having the particular technical qualities required for its own purpose. Wage and retail payments between people who have no great faith in the trustworthiness of banks or governments give rise to the need for a metallic coinage, while the transfer of funds on a large scale from one place to another calls for some more developed form of currency of the nature of cheques or bank drafts.

So far the properties considered have been those which are important in the *currency*, *i.e.* in the media which can be passed readily from hand to hand as an effective means of making current payments. More difficult questions arise in connexion with the properties required in the use of money as a *standard of value*, *i.e.* as the unit in which contracts to make future payments are expressed. When any party enters into a contract involving a future payment, when, or example, he buys goods by giving an undertaking to pay a number of units of money at some distant date, it is evidently of the first importance, both to the party who will pay these units and to the party who will receive them, that their exchange value, their purchasing power, shall not have altered in the interval; or, at any rate, that it shall have altered only in a way which was easily calculable by both. If the unit in which the one side of the contract is expressed varies in a way which is not foreseen, economic adjustments are rendered more difficult and uncertain. Those who are in the best position to anticipate the change can profit at the expense of the less well-informed, business generally becomes more risky, and there occur transferences of wealth quite arbitrary in character and quite incalculable in their social effects. The demand for money, therefore, requires that it shall possess this further property, that each unit shall be free from arbitrary changes in value.

7. The conclusions of this chapter are then that the demand for money arises from the volume of payments, and is a demand for media adapted to two main purposes, and consequently possessing two distinct properties. They must possess, first, the general acceptability and those minor qualities which fit them to serve as a convenient means of effecting immediate payments. They must possess, secondly, the stability of value which enables them to serve as a suitable basis for contracts involving payments to be made in the future. There are therefore two main questions to be dealt with on the side of supply. The one is concerned with the technical efficiency of the means of payment and the economies to which they give rise; the other is concerned with the means by which the unit of money can be given stability of value. These questions will be taken up in order.

CHAPTER VII

THE SUPPLY OF MONEY; ITS TECHNICAL EFFICIENCY

THE first question to be dealt with on the side of Supply is that of the various forms of purchasing power manufactured by the market, and their technical efficiency as means of making payments.

If it is true that general acceptability is the essential characteristic of a currency, one might suppose it impossible to produce any currency which could displace gold. Gold is acceptable at all times and at all places. This for two reasons: the first, more important in the past, lies in the fact that it has a high value apart from its value as money; the second, of the greatest importance now, arises from the fact that it is the medium in terms of which contracts of all kinds are expressed, and consequently the means by which those contracts may unfailingly be discharged. Gold is then the one universally acceptable medium in this sense that it is the ultimate means by which transactions between any two parties may at all times be discharged throughout the greater part of the world.

But it is not the universally acceptable medium in the sense that it is the most convenient means by which transactions may be carried through. Indeed, the perfect negotiability of gold is itself one of the main causes of its inferiority in competition with other forms of currency, for it exposes the party who holds or transmits it to considerable cost and risk in safeguarding himself against loss. Hence it becomes more convenient in practice to substitute for the metal itself titles to gold which may be limited in their negotiability, and may be held or transmitted from place to place with greater security and lower cost. This substitution evidently contributes materially to the efficient dispatch of business. Some idea of its importance: some idea, that is to say, of the importance of the economy effected by the market in manufacturing convenient forms of currency, may be formed by contrasting the hypothetical condition in which gold was the only means of payment with the conditions which actually exist.

If gold were the sole means of making payments in international trade, every import and export would be duplicated by an export and import of metal; millions of pounds of gold would be constantly in course of transit; and the costs of carriage and risks of its transmission would form a very heavy tax on all trade between one nation and another. In actual conditions, of course, gold is not so used. It remains the ultimate means by which international indebtedness may be discharged; but it is now employed only when other means are unobtainable, or are obtainable only at a higher cost. Bills of exchange are far more economical in use. They are promises to pay gold usually at some future date; but before that date is reached bills requiring the movement of gold in one direction are set off by other bills requiring the movement of gold in the opposite direction, and the actual transmission of the metal is avoided. Even when these bills do not fully set off one another, and there is a balance of indebtedness to be met, it may still be cheaper to settle that balance by the export of other readily marketable goods, in particular, Stock Exchange securities. The cost of effecting payments by means of gold is equally evident in home trade. Its perfect negotiability enables a thief to make full use of it, while its weight makes it a costly means of settling distant transactions. If it were the sole means of effecting payments, business men would need to build strong rooms and safes to safeguard their stocks of money, and would incur heavy costs in transmitting it from one place to another.

These are the conditions which form a basis of comparison, on which one may rest an estimate of the importance of the economies arising from the work of the market in substituting more convenient forms of purchasing power. The market effects these economies in substantially the same way in all highly developed countries. In foreign trade it substitutes telegraphic transfers, bills of exchange and securities; in home trade it enables each country, in effect, to take a quantity of the metal from the international gold market, to hold this as a stock, and to multiply it for internal use into a larger stock of purchasing power in the typical form of titles to gold.

Prior to the war, of course, gold was itself largely used for currency purposes, the amount actually in the hands of the public being in the neighbourhood of £80 m.[6] Since that date Treasury notes, a cheaper though not necessarily a more convenient form of currency, have been issued to the extent of about four times that figure, and gold has been withdrawn into central reserves to serve as a means of making payments abroad, and as the basis of the internal stock of paper currency.

In England the supply of titles to gold into which the central stock is multiplied takes many forms, each adapted to some particular kind of payments.

Substitutes for gold which are printed on silver and bronze are evidently more convenient for the minor transactions in which they are employed than would be the minute portions of gold which they represent. Their use in wage and retail payments is considerable, the total quantity of silver employed in the United Kingdom in 1910 being about £24 m.[7]

Titles in the form of bank-notes are more convenient than gold for certain kinds of transactions, but their use is very limited. In England, Bank of England notes are employed, for example, in payments such as solicitors' settlements which must be made in full legal form, and by holiday-makers in places where they are not known; but the average amount actually in the hands of the public in pre-war days probably did not exceed £8 m. Notes issued by Scotch and Irish banks are used for more general purposes, but amounted at the same date only to about £15 m., while the total of those issued by provincial banks in England was only a few hundred thousand pounds. At the same time the annual issue of Postal and Money Orders, especially adapted for small and distant payments, was about £96 m.

Last in order of development and much the most important are cheques, which are titles to gold one stage further removed; for they are not direct promises to pay gold, but orders drawn by one party on another party, the banker, who undertakes to pay them in gold. They depend for their acceptability, first on confidence in the drawer, secondly, on confidence in the banker on whom they are drawn; if this confidence fails their use ceases. Given this confidence, however, cheques are by far the most efficient form of currency yet invented, and are especially adapted to make distant payments of large and irregular amounts. They are quickly "cleared" by an efficient system of central and local Clearing Houses. They carry with them a title to gold; they form a convenient record of transactions; their negotiability may be restricted in a manner which makes them practically valueless to anyone but the owner; and, finally, they may be adapted in amount to the needs of each particular operation. By means of cheques, bank deposits form, as it were, an *ad hoc* currency, a currency created in adaptation to particular payments as they arise. The volume of this currency is to be measured by the volume of bank lodgments, or rather by that part of them made specially for the purpose, namely, lodgments on current account. Only three or four banks distinguish lodgments on current account made for cheque-making purposes from those on deposit account made in exchange for a rate of interest. If these banks may be properly regarded as representative in this respect of the whole system, the total lodgments forming the basis of the cheque currency in England amounted in 1913 to about £560 m. (cf. p. 128).

About one million cheques were drawn each working day, while the aggregate value of cheques and bills passing through the Clearing Houses in the course of the year reached a total not far short of £17,000 m.[8]

Broadly speaking, the total volume of lodgments on current account may be regarded as equivalent to a stock of bank-notes of similar amount held in the pockets of the public. When an account-holder pays away a cheque of £5 the effect is substantially the same as when a note-holder pays away a £5 note. The cheque is paid into another account, the note goes into some one else's pocket; the total volume of lodgments and the total stock of notes outstanding remains unaffected. In the one case an individual makes over to his banker the use of resources and receives in exchange the right to draw cheques for an equivalent amount as and when he needs to make payments; in the other, he makes over the use of resources in exchange for an equivalent amount of ready-made currency available for the same purpose.

In addition to the various forms of currency manufactured by the specialized institutions of the market is the purchasing power created by manufacturers, merchants and others when they allow their customers to buy goods from them on an implicit promise to pay recorded in the form of a book debt. It may be objected that this system of trade credit does nothing but postpone payment, that it merely defers the use of currency and consequently adds nothing to the average volume of purchasing power. This would be only partially true if the total volume of book debts were always about the same; for although in that case the creation of new book debts would proceed concurrently with the extinction of old book debts by the use of currency, it would still be true that the average volume of purchasing power had been increased by the mere fact that payment was deferred. The average volume of these deferred payments would still constitute a net addition to the total stock of purchasing power, for corresponding to it would be an average volume of goods purchased without the use of currency. The significance of book debts, however, lies less in the addition which they make to the average volume of purchasing power than in the ease with which they are expanded and contracted, and in the fact that these variations are free from any control on the part of the market organizations whose business it is to regulate the supply of purchasing power. If, for example, the immediate outlook is favourable and business men wish to increase largely their stocks of materials and finished goods, their ability to purchase against book entries constitutes a net addition to the total volume of purchasing power in the same way as, in similar circumstances, would an expansion of cheque currency. But while the latter form of expansion is more obvious and can be dealt with by the Bank of England or the banks generally, the former kind of expansion is quite beyond their control. These considerations are, however, bound up with the question of the regulation of the supply of purchasing power and must be dealt with later.

It should be noticed that the implicit promise to pay represented by a book debt is frequently embodied in an explicit promise in the form of a bill of exchange or promissory note. Some of these bills and notes may be passed from hand to hand, and so used as a means of payment in a number of successive purchases; in so far as they do so, they multiply the purchasing power created by the book debt which they represent. It seems very improbable, however, that in English home trade their effect in this way is at all considerable. Their importance seems to lie rather in their effect in converting a book debt into a form of security which enables the creditor, by discounting the bill, to replenish the resources at his disposal.

This description of the various forms of purchasing power in use in the United Kingdom suggests the enormous increase in the technical efficiency of the means of payment due to the market. The stock of gold is expanded by specialized organizations into a larger stock of currency in forms which greatly lower the cost of making near and distant payments. It is further expanded by the more informal organization of the market into a still larger volume of purchasing power in forms far more efficient than gold as a means of payment. This total volume is composed essentially of titles to gold in the form of promises or orders to pay; it is based on confidence or credit. The normal level of credit, that is to say, the normal level of confidence in the Government, the banks and the business men of the country, is the condition which enables the market to substitute these more convenient means of payment for gold; it determines the multiple which relates the stock of gold to the total volume of purchasing power; and is consequently the main determinant of the proportionate size of the gold reserve. The use of credit to effect these normal economies brings with it, however, serious disadvantages. It makes the volume of purchasing power dependent on the state of credit. If the use of credit could be properly controlled it would bring with it the added advantage that the volume of purchasing power could be readily adapted to the volume of money work to be done. In fact, however, this control is imperfect, and changes in the level of credit bring with them great changes in the volume of purchasing power, which, being in no close relation to changes in the volume of money work, cause changes in the value of the unit of currency, i.e. the level of prices, and introduce very important disturbances in the adjustment of social resources to social needs.

As already stated, the practice of multiplying a central stock of gold into a larger and more elastic supply of titles to gold extends to all developed countries; but the particular form of these titles, and consequently their efficiency, varies a good deal as between one country and another. In the United States political influences have greatly checked the development of the most efficient forms of currency and, until recently, loaded the country with heavy stocks of gold and silver inefficiently employed.[8] Nevertheless, the cheque system in this and other English-speaking countries has been able to take its proper place as the most important of the means of payment in use. By way of illustration it may be noticed that the proportion of the total amount of payments made by cheque in the United States has been estimated to be no less than 92 per cent of the whole.[9]

It seems likely that in Germany and France the main influence determining the form of the currency has been the political and social insecurity due in part to the constant exposure to wars on their own territory. In such conditions it is likely that the powers exercised by the State will be more extensive than elsewhere, and also that the general level of confidence will be too low or too unstable to make profitable the supply of paper currency by parties other than the State itself.

Prior to the recent war the currency of Germany consisted mainly of the £120 m. or so of notes issued by the Reichsbank, an organisation subject to the control of the Imperial Chancellor, probably about £100 m.[10] of gold and £50 m. of other metal coinage (excluding reserves). It was a frequent complaint of German writers that people held unduly large amounts of this currency in their cash-boxes and were unwilling to adopt the more economical plan of lodging their spare resources with a banker.[11] The imperfect confidence which this habit suggests is no doubt largely responsible for the fact that the cheque system has made comparatively little headway in Germany, though recent legislation designed to encourage it may now hasten its development. As the greater part of the German currency is clearly not convenient for making payments at a distance it has been supplemented by the development, mainly under State control, of the so-called "giro" system by which the Reichsbank, the Post Office, and a number of other institutions undertake at a very low charge to make payments at the request of one party to other parties situated elsewhere. This system is already on a very large scale and is being developed further.[12]

In France similar conditions have led to substantially the same results. The Bank of France, a quasi-state institution, supplied notes which amounted in 1914 to some £240 m., and with about £200 m. of gold and £60 m. of silver formed the main part of the currency in the hands of the public.[13] There are the same complaints that the people retain too large a quantity of this currency in their own possession, the same appreciation of the advantages of the cheque system and the same hope of its extension.[14] Distant payments are made on a very large scale by a giro system similar to that of Germany, and developments of this system are still in progress.

CHAPTER VIII

THE SUPPLY OF MONEY; ITS STABILITY OF VALUE

THE previous chapter dealt with the various forms in which units of money were supplied by the market, considered in respect of their efficiency as a means of effecting payments. The present chapter is concerned with the second main question on the side of supply: the unit considered in respect of its stability of value, *i.e.* of its suitability to serve as the basis of contracts involving *future* payments. The question cannot be made a simple one; moreover its parts are so interrelated as to make any simple order of development difficult to find. It will be as well then to begin with setting down plainly the order in which the matter is to be treated. It will be convenient, in the first place, to deal with certain minor complications arising from the fact that the stock of money is not homogeneous. These being removed, the main causes determining the stability of the unit of value can be set out, not with a view to adding anything to the previous discussion, but in order that the argument may proceed directly from the basis on which it ultimately rests. It will then be possible to distinguish the main causes of instability, and to follow this up by a discussion of the social importance of the consequent disturbances. Any full discussion of the various methods by which these disturbances can be removed or alleviated is outside the scope of this book; but some indication will be given of the nature of the remedies, and this will be followed up a little further in the course of a more detailed discussion of the banking system.

We may begin by considering a little more fully the nature of the stock of money supplied by the market. As already noticed, this stock may be regarded as arranged in three concentric rings. The core is composed of gold, and may be known as standard money; it is employed directly on money work only to a small extent, its main use being to serve as a basis for the supply of more convenient means of effecting payments. This gold is multiplied by the specialized institutions of the market into a larger stock, consisting mainly of the subsidiary coinage, bank notes and deposits. The whole of this depends for its acceptability on public confidence in the parties issuing it, that is to say, on credit. It circulates from hand to hand, and may therefore be described as currency. The supply of currency is expanded into a still larger stock of purchasing power by means of book debts and other means of purchase, the extent to which this expansion occurs depending, again, mainly on the state of credit. The general character of this stock leads to the first three considerations which have to be dealt with.

In the first place, it is evident that the stock is not perfectly homogeneous. Each of the several parts of which it is composed is adapted to its own particular use; each is in some degree independent of the others, and subject to its own special conditions of supply and demand. The supply of gold for monetary purposes depends mainly on the activity of the mines; an increase in its supply has very important effects, for the increase will normally be multiplied by the market. The supply of other currency, while subject to the same influences, is dependent also largely on the will of the banks; while the supply of purchasing power granted by business men in the form of book debts is likely to vary with their confidence in the business outlook. In a similar way, there is some degree of independence in the various parts of the demand for money. For example, the demand for deposit currency has for many years been growing much faster than that for notes or gold, while seasonal variations in the demand for money fall with unequal pressure on the different parts of the supply. This partial independence of the different elements composing the total stock of money sets up internal strains of a minor character. An instance of some practical importance is seen when increasing business activity is accompanied by an expansion of credit. In these circumstances the growing demand for money of all kinds leads to a withdrawal of gold and silver for making larger wage payments, and so reduces the basis on which the cheque currency rests and limits its further expansion. In normal circumstances the partial independence of these various elements of the stock of money is insufficient to cause any divergence between the value of the different kinds; a sovereign, a pound note and a cheque for £1 have equal purchasing power. In exceptional circumstances, however, these values may diverge. When, for example, during the Napoleonic wars the Bank of England note was made inconvertible and its connexion with gold temporarily broken, the value of the note fell below that of the five sovereigns it represented; so, too, as a result of the restrictions on the use of gold, Treasury notes have diverged in value from their nominal equivalent in sterling. Again, during the American crisis of 1907 the value of the cheque in the Middle West fell below its nominal value in gold, for gold was unobtainable, and the cheque was not universally acceptable in wage and similar payments. Yet, again, differences in the degree of confidence which the public feel in the various parts of the currency may cause a divergence in their value; such was the case in Russia in 1918 when Imperial rouble notes circulated at one value, those issued by the Kerensky Government at a lower level, and those issued by the Bolshevik Government at a lower level still. It is conceivable that a failure of confidence in the English banks might cause the bank-note or the cheque to fall to a discount in terms of gold. In fact, however, the experience of the present war has shown that such an influence is too remote to need consideration. We conclude therefore that the stock of purchasing power is not perfectly homogeneous; that consequently there arise disturbances within the stock which in exceptional circumstances may lead to serious divergence in the value of the elements of which it is composed; but that in normal conditions the unit of each kind is identical in purchasing power. With this brief discussion we may set aside the complications due to the composite character of the state of money and henceforth regard this stock as homogeneous.

We may now pass on to consider the main causes on which the value of the unit of money depends, defining the unit as the sovereign, or one of its substitutes. The question to be considered is that of the general causes governing the purchasing power of the sovereign, or, what is the same thing, the general level of prices. It has already been shown that the value of the unit of money depends on the relations of demand and supply. We take the demand for money to consist simply of the volume of payments, present and contingent; but supply must be given a wider meaning than that employed in the discussion of the Quantity theory and, for the purposes of the present argument, be taken to include not only the volume of currency, but the total stock of purchasing power whose nature has just been discussed. Stability in the value of the sovereign depends, therefore, on a continuous correspondence between the volume of money work and the volume of purchasing power; any variation in the one unaccompanied by a similar and equivalent variation in the other expresses itself as a change in the purchasing power of the sovereign, or what is precisely the same thing, a rise or fall in the general level of prices. In actual conditions the volume of money work varies from causes which are largely beyond control, while the volume of purchasing power, so far from adapting itself to these variations, is subject to arbitrary and independent fluctuations of its own. The practical problem of imparting stability to the purchasing power of the sovereign lies, therefore, in such a regulation of the stock of purchasing power as will eliminate arbitrary variations on the side of supply, and will cause the stock to vary in volume in response to changes in the volume of payments.

In order to investigate the principal causes of changes in the purchasing power of the sovereign we may conveniently separate them into three groups in accordance with the length of the period during which they operate. In the first group we include secular movements such as the continuous increase which occurs in the volume of money work, and persistent changes in the annual output of the mines. In the second group we include more temporary causes, of which the most important are those operating in cycles of nine or ten years: those contained in changes in the general level of confidence which, by initiating an increase in the volume of purchasing power, introduce a rapid rise in the general level of prices, followed during the latter part of the period by an equally rapid fall. In the last group we include those transient influences which originate in such conditions as seasonal changes in the volume of payments, or a temporary ebb or flow of gold.

The separate influence of these three sets of causes on the purchasing power of the sovereign are partly illustrated by a diagram, such as that prepared by Sauerbeck, showing the course of average prices during the past one hundred years. The effects of the persistent causes contained in the first group dominate the general trend of the price level, and are shown in red in a hand-drawn curve. They are especially marked during the period following 1875, when the enormous expansion of production caused so great an increase in the volume of payments that, in spite of the concurrent growth of the cheque system, the purchasing power of the sovereign was persistently raised for twenty years. At the end of this period the increased output from the South African gold mines reversed this movement and initiated a rise of prices which has since been emphasized by conditions of general war. Superimposed on this is a second curve, showing rhythmical fluctuation of prices about the primary curve, due to cycles of alternate activity and depression. Finally, we may suppose the influence of the last group of causes to be shown by a third curve superimposed on the second and fluctuating closely about it. This third curve is, however, not shown on the diagram; and, if it were, it would not fully illustrate the operation of this third group of causes; for their effects on prices are to some extent extinguished by the influence of the banking system in counteracting temporary changes of pressure in the foreign demand for gold, and in adapting the supply of currency to temporary changes in the home demand. These influences must be examined rather more fully in the following paragraphs; but attention will be given mainly to the side of supply, inasmuch as the question with which we are primarily concerned is the elimination of these variations by the regulation of the volume of purchasing power.

The production of gold is controlled by mineowners working for profit on ordinary business principles; it depends to a much less extent than before on the working of alluvial deposits and to a much greater extent on the application of ordinary industrial methods in the extraction of the metal from ores of comparatively low yield. Accordingly, when the exchange value of the metal falls, the amount produced tends to decline; for example, during the period 1913–1918, when the purchasing power of the sovereign was falling fast, the world's annual output of gold declined from £95 m. to about £83 m., a decrease of some 14 per cent.[15] Conversely, when the exchange value of the sovereign rises, output tends to increase. But gold is very durable and the accumulated stock is large; the amount in money uses throughout the world being estimated in 1914 at about £1700 m.[16] Changes in the annual output initiated by changes in the value of the sovereign can, therefore, exert little influence during short periods upon the size of this stock; in other words, during periods of a few years there is little response in the total supply of gold to changes in the volume of money work.

When longer periods of time are taken into account, history shows that changes in this supply of gold have been still more independent of demand, for they have depended primarily on the discovery and exhaustion of mines, and improvements in methods of production. It is clear, therefore, that the supply of gold, the first element in the stock of money, does not adapt itself during short periods to changes in the amount of money work, and that over long periods it is subject to arbitrary changes of its own which are an important cause of variations in the purchasing power of the unit of money.

The second group of influences disturbing the value of the sovereign are bound up with changes in the general level of confidence; they are those which cause the actual level of prices to oscillate rhythmically about the primary curve. A little more must be said with regard to the nature of these influences. We may begin by repeating a statement which appears to be axiomatic: namely, that no change can occur in the value of the sovereign, that is to say, in the general level of prices, except through the causes governing the supply of purchasing power (or the activity with which it is employed) and the volume of money work. If that statement is true—and it seems difficult to doubt it—it follows inevitably that the upward movement of prices which marks the earlier stages of a business cycle is due to a more active use of the stock of purchasing power, or to an increase in its volume proportionately greater than the increase in the volume of money work which it is substantially certain occurs at such times. It is not difficult to see how such an increase may occur.

As a basis of explanation we have the following conditions, already noticed, namely: that the total purchasing power in the hands of the public consists predominantly of bank deposits, notes, and the power to buy granted by business men to their customers and recorded in the form of book debts and contracts; that the volume of this purchasing power depends upon the level of credit; and that the level of credit is part of a more general condition, the level of confidence. In order to indicate the influence of these conditions let us assume a rise in the general level of confidence in the business outlook; that is to say, an anticipation by business men that increased output will be followed by profitable sales. Increased confidence initiates a cumulative increase of business activity, and by so doing directly encourages the desire to borrow. Contained within it, is increased confidence on the part of lenders; *i.e.* a rise in the level of credit, which increases the willingness to lend or, more broadly, to invest.

Under the influence of this double stimulus, the greater willingness to invest and the greater desire to borrow, the supply of purchasing power is likely to be increased from many sources. A portion, at least, of that part of the stock of money which is held as a reserve against contingencies (cf. pp. 32–3) and much of that which is accumulated on deposit accounts and elsewhere pending a favourable opportunity of investment (cf. pp .70–1), is likely to be thrown into active circulation; ". . . as an immediate result of every boom in industry and trade," says Lansburgh,[17] "part of the money deposited with the banks is withdrawn and invested in the most profitable branches of business." That the same influences lead to an expansion of trade credit is suggested by the increase, at such times, in the volume of speculative operations and of bills of exchange (cf. pp. 270–3); while the foreign statistics showing the increased number of bills discounted by bankers abroad and the tendencies of banking policy in this country both suggest that the prevailing confidence encourages banks to expand their loans and so add still further to the increase in the volume of purchasing power and the consequent rise in the level of prices.

These considerations bring out two points of significance: they show how readily the volume of purchasing power may be expanded as a result of a rise in the general level of confidence; and they show that a part, and perhaps a very large part, of this expansion takes place in a manner which is quite outside the control of the market. There is no central authority which can check the active employment of money previously held in reserve, the transfer of lodgments from deposit to current account or the expansion of trade credits. The banks, however, are able at will to vary the volume of the cheque currency by increasing or diminishing their loans; it is therefore with them that the main power must lie of correcting the undue expansion of purchasing power during periods of rising prosperity. For this reason—the intimate connexion between expansions of credit and banking policy—little is said at this point with regard to the phenomena of business cycles; the brief outline which we require is given in later chapters in the course of a more detailed discussion of the banking system.

A similar reason makes it convenient to postpone consideration of the third group of causes which set up minor fluctuations in the value of the sovereign. Some indication of their nature and their social cost is given in the following chapter, but they are most appropriately examined in connexion with the machinery and policy of the banking system.

The argument of this chapter may now be summarized. It has shown that the stock of money is composite and that in consequence there occur within this stock certain minor disturbances which may in exceptional circumstances give rise to divergence in value between the elements of which it is composed. Neglecting these divergencies, however, the value of the unit, *i.e.* the purchasing power of the sovereign or its substitute, is determined by the relations between the volume of money work and the volume of purchasing power. Stability, therefore, can be attained only by a continuous adjustment of the one to the other. So far, however, from the stock of money adapting itself to changes in demand it is subject to arbitrary changes of its own. Being composed essentially of gold multiplied by the use of credit into a larger supply of purchasing power, its volume varies with the activity of the mines, with the general level of confidence and with other minor causes. Accordingly, in addition to variations arising on the side of demand, the purchasing power of the sovereign is subject to persistent changes extending through long periods as a result of changes in the profitableness of gold mining; it is subject to more rapid and intense variations owing to alternate expansions and contractions of credit, and finally it is subject to transient oscillations arising from such influences as a temporary shortage of gold or a "lock up" of bank currency.

In addition to these causes, arbitrary state action has always existed as a potential source of disturbance in the value of money. In 1913 the monetary system of this country might reasonably have been discussed without reference to the possibility of such action on the part of the English Government; but the incidence of the European War has dispelled this with other illusions, and raised this cause of disturbance to a position of predominant importance for the time being. During the war the supply of legal tender money has been increased by some £360 m., and bank loans have been more than doubled. This expansion of the money stock, accompanied by a decline in the volume of money work, has naturally led to a fall in the value of the unit of currency, in terms of goods, of some foreign currencies and of gold. The falling value of money, in other words, the rising level of prices, has caused a transfer of wealth to business men from those whose incomes are fixed more or less unalterably by contract and custom; and this transfer has led to social unrest partially expressed in the continuous demands for higher levels of money wages. The extent and the ramifications of the social disturbance due to the expansion of the money stock could not of course have been predicted; for monetary influences have been complicated by the disorganization of production, abnormal State control, the disturbed condition of foreign countries and the growing aspirations of labour. But the general character of these effects are quite in harmony with the past experience on which monetary theory is based. The course of events since 1914 has given a compressed and vivid account of the manner in which the money system operates. It leads not to a reversal but to a refinement of economic theory. It may complicate, but it does not remove, the monetary causes of social disturbance which were in operation before the war; and the need for their examination is as great as it ever was. Partly for this reason, partly because this book is concerned mainly with general theory, partly because of the large and growing literature following in the train of current changes, no account is given here of the convulsive monetary history of the past few years.

CHAPTER IX

THE SUPPLY OF MONEY; SOCIAL DISTURBANCES DUE TO INSTABILITY OF VALUE

HAVING distinguished three kinds of variation in the purchasing power of the sovereign, it remains to consider their social importance. It will be worth while to begin by stating the reasons which make changes in the value of gold more important than similar changes in other commodities. This can be followed by a general statement of the manner in which the social disturbance due to the first two kinds of variation actually arises. And finally some account can be given of the less important fluctuations which occur from day to day in the Money Market.

Variations in the value of the unit of iron, or wheat, or other commodity, increase the uncertainty of business to those who deal in them and so have a local importance of their own. Variations in the value of the sovereign have an importance which is enormously greater; not only do they increase the uncertainty of business generally, but they distort the normal adjustments of resources to needs and set up disturbances of the greatest social importance. The reason for this difference is not difficult to find. It lies in the fact that the sovereign, being the unit in terms of which payments are effected, naturally becomes also the unit in which are expressed the values of goods both present and future. In consequence of this, changes in the value of the sovereign differ from changes in the value of ordinary commodities not only in the far wider range of their effects, but also in two other respects.

From the fact that the sovereign is the unit in which the values of other things are measured, it follows that its own value cannot be stated like that of iron or wheat, by a single figure apparent to all. A change in the value of iron is readily shown by a quotation of its price; a change in the value of the sovereign can be shown only by means of an index number, *i.e.* a figure showing that it will purchase a greater or smaller quantity of a composite group of goods selected as representative of all. Such an index number will often give ambiguous results, and in any case conveys little to the average business man. While, therefore, any change such as an increase of supply will, in the case of iron, be immediately felt in the market and published abroad by a fall of price, a similar variation in the case of the sovereign cannot be readily expressed in a single figure. It is consequently not generally recognized, and does not cause an immediate and universal change in its value in terms of all other goods; in other words, it will result not in an immediate adjustment, but in a slow and irregular fall in the value of the sovereign; that is to say, a slow and irregular rise in general prices. There is a second point. Possible changes in the value of wheat or iron are at least the subject of business discussion; they may in part be foreseen, and so affect the terms of contracts involving future delivery. But, owing to the natural habit of regarding the unit of value as invariable, changes in the purchasing power of the sovereign are frequently not even contemplated, and if they were, the causes on which these changes rest would usually be too obscure to enable them to be adequately taken into account in contracts involving future payments. These three considerations, the variety of causes initiating variations in the purchasing power of the sovereign referred to in the last chapter, the impossibility of adequately foreseeing these changes, and their imperfect recognition by the general public when they are actually occurring, are of especial importance in modern conditions where production takes time and is based largely on contracts involving future-payments.

In modern conditions the various parties to production bind themselves together in a set of contracts which are expressed in terms of the sovereign and commonly based on the assumption that its purchasing power will remain invariable. A rise or fall in the value of the sovereign surreptitiously modifies these contracts and so causes a transfer of wealth from one party to another. This effect results from the fact that the change could not be foreseen. It is reinforced by the further fact that when the change is occurring it is only imperfectly realized. Substantially all wage contracts, as well as some contracts for the supply of capital and the hire of buildings and land, are made for short periods and are consequently capable of being rapidly modified to meet the changing conditions. In fact, however, the imperfect recognition of the changing value of the sovereign delays this readjustment; rates of wages, interest and rent are varied too slowly and the transfer of wealth continues practically throughout the whole period of the change.

The first condition is then that changes in the purchasing power of the sovereign modify current contracts and cause a transfer of wealth among the producing parties. The social effects of this disturbance are most conveniently seen by tracing their influence on the action of business men whose function it is to undertake the organization and to bear most of the risks of production.

The business man may for many purposes be conveniently regarded as a middleman operating between a set of prices. He has before him, on the one hand, the prospective price of some product, and on the other, the current prices of the various materials and services of which the product is composed. It is his object to buy supplies of these elements, combine them into a finished product and to draw a profit from the difference between the sum of their prices and the price at which he sells the product. He is therefore the centre of the set of contracts on which the typical productive operation is based. In actual practice he may obtain the use of land and buildings on lease; he is likely to obtain a part of his capital against mortgages, debentures or preference shares, *i.e.* by long contracts at a fixed rate of interest; he will obtain his supply of labour on short-wage contracts and his supplies of materials on contracts of varying length. All these contracts are expressed in terms of the sovereign which, broadly speaking, is regarded by all the parties concerned as fixed in value. In these circumstances if the purchasing power of the sovereign begins to fall, in other words if prices begin to rise, there begins a transfer of wealth to him from property owners, capitalists, wage-earners and, temporarily perhaps, from those who supply him with raw materials. He receives a bounty over and above the return which he anticipated, and his business becomes exceptionably profitable. He therefore extends his operations. There is an increased demand for labour which finds full employment at rates of wages whose nominal value is slowly rising; an increased demand for bank loans at rising nominal rates of interest, and an increased demand for raw materials at rapidly rising prices. But even though the prices of his raw materials rise more rapidly than the price of his finished product, the bounty continues; for the rate of interest on his fixed contracts for capital remains unchanged, the wages of labour move upward only slowly, and the new supplies of capital from the banks are likely to be obtained at rates which do not take full account of the falling value of the sovereign. Moreover, as already noticed, the additional supply of "capital" obtained from the banks is not an addition of raw materials and so on, but an increased supply of "command over capital," or purchasing power whose effect is to raise prices further and to increase the stimulus to business activity. But this bounty to business men is obtained at the expense of other parties, for every shilling paid in rent, wages or interest has a lower purchasing power than before. The effect of this fall in the value of the sovereign has been, therefore, to distort the price index on which the various parties to production have adjusted their relations to one another, thereby giving a stimulus to business men, a stimulus which is wholly *artificial and cannot, as events are now ordered, be permanently* sustained.

Opposite effects follow in the converse case when the purchasing power of the sovereign is rising. A transfer of wealth sets in from business men to property owners, wage-earners and capitalists, and continues so long as the readjustment of rates of rent, wages and interest is incomplete; profits decline, business is contracted and unemployment increases, these effects again being due to the distortion of the price index on which economic adjustments are based.

The essential effects of changes in the purchasing power of the sovereign appear then to lie in the transfer of wealth which affects especially the profits of business and consequently the activity of business men in organizing production. Changes in one direction stimulate trade and industry; real rates of wages and interest are adversely affected, but labour and capital are fully employed; the exceptional profits of business lead to speculation and the growth of speculative undertakings, many of which can exist only so long as the stimulus is maintained. Changes in the other direction depress trade and ndustry; real rates of wages and interest are favourably affected, but much labour and capital is idle; losses and low profits make business men unduly timorous.[18] While these seem to be the essential effects of changes in the value of the sovereign, their ramifications and their final consummation depend largely on the cause to which the change was originally due.

A change due to a persistent increase in the output of gold may, by affecting the general level of confidence, promote an expansion of credit and thus indirectly cause a severe fluctuation of business activity; an instance of this was the effect of the new Californian gold in promoting the conditions which led to the crisis of 1855. Such a change need not, however, lead directly to a reckless expansion of business of this kind; it may have as its chief social evil a redistribution of wealth which injures wage-earners and people with fixed incomes.[19] Perhaps the most striking effects of a persistent change of this kind are seen in the period following 1875, when the output from the mines was insufficient to keep pace with the growing volume of business transacted in terms of gold, and the value of the sovereign appreciated continuously for twenty years, the general level of prices falling from 100 to 64 during that period. The rising value of the sovereign, carrying with it a transfer of wealth from business men, produced a marked and persistent business depression. Profits were low, unemployment was widespread, but rates of real wages rose more rapidly than at any time during the century. At the end of this period the new supplies of gold from South Africa reversed the situation and introduced a series of changes in the opposite direction which have continued until the outbreak of war. Business profits increased; rates of interest and wages nominally rose, but the rates of real wages seem to have been stationary or, perhaps, even to have declined, a circumstance associated with the growing unrest among the working classes during recent years.

It would be unreasonable to expect that any one thing should possess in a high degree the properties which adapt it to serve as a convenient means of effecting current payments, and also that stability of value which fits it to serve as a standard in which contracts involving future payments may be suitably expressed. Gold has been employed for both purposes, and in consequence has served neither with any approach to perfection. Possibly it has filled the two uses better than any other single thing could have done; but in its use as currency it has been largely displaced by paper, and it is evident from the changes in its purchasing power during the last hundred years that its employment as a standard leads to social evils sufficiently serious to justify a search for a more efficient substitute. It would, of course, be possible to moderate these persistent changes by exercising control over the mines, and by allowing the output to vary not, as now, in accordance with the profitableness of mining, but in conformity with changes in the money and industrial demands for the use of gold. It seems, however, that a more effective method would be to abandon gold as the standard of value, and to employ some other standard specially selected to serve this purpose alone. Such a proposal is now very old. Jevons, Marshall and, most recently, Professor Irving Fisher have advocated the use, voluntarily or compulsorily, of a standard based on an average value of a group of selected commodities. However, even the fluid social conditions of the present time, and the rapidity with which the structure of society is now being modified, do not seem to bring much nearer the possibility of a change so difficult to comprehend and of so far-reaching a character.

Changes in the purchasing power of the sovereign due to persistent changes in the supply of gold introduce disturbances which are sufficiently serious. They are overshadowed, however, by the evils of changes which arise from expansions of credit. During the course of such an expansion not only does the value of the sovereign fall very rapidly, but it provokes an extravagant and artificial expansion of business activity which proceeds until its contained causes destroy the undue confidence on which it is based, and lead, perhaps through a crisis, to falling prices and a business depression in which social resources, human and material, are disorganized and partly unemployed. The history of the past century is full of such fluctuations of business activity, and it is unnecessary at the moment to trace their course more fully. The point which needs emphasis now is that an expansion of purchasing power is an essential condition for the rapid rise of prices during the earlier stages of a business cycle, and that this expansion is a consequence of a rise in the level of credit. In practice, business men, if they were willing to do so, could hardly unite to check these effects of expanding credit; but it would seem to be within the power of the banks to take effective action, during periods of rising confidence, to restrict the supply of currency granted to business men, and so to check the rise of prices on which this increasing confidence largely depends. This line of thought suggests that in existing conditions the most effective remedy for expansions of credit is to be found in a modification of the loan policy of the banks.

The short period changes in the value of the sovereign which now remain to be considered have their origin mainly in temporary changes of pressure on the central gold reserve. We may retain the assumption of an effective gold standard and deal with them in the light of pre-war conditions. Their influence in post-war conditions is indicated later.

In proceeding to consider the social effects of these variations it is convenient to recall the fact that the currency issued on the basis of this reserve is supplied by way of *loan*, and consequently that every change in the volume of supply is reflected in the rate of interest at which that supply is marketed. The manner in which currency is issued does not in any way alter the fact that every increase in its supply initiates a fall in the purchasing power of the sovereign, *i.e.* a rise in the level of prices, and that every decrease tends, conversely, to bring about a fall of prices. But it makes it easier to indicate the social cost of these temporary variations; for, instead of attempting to trace their temporary effects in terms of prices, it will be sufficient, and much more simple, to consider them in terms of the disturbances they produce on the rate of interest, or rather on that particular rate of interest which is paid for the use of capital supplied for short periods against bills of exchange and is known as the market rate of discount.

When the quantity of gold flowing from the mines into the London market is persistently increasing the supply of the metal available for money use throughout the world, there naturally occurs a persistent tendency to an increase in the central gold reserve held by the Bank of England. In the normal course of events the banks, having larger reserves, would extend their loans, and by so doing would multiply the excess in the customary proportion; the volume of deposit currency would be increased and there would set in a persistent and irregular rise of prices accompanied by the effects which have already been discussed. When the increase of gold in the London market is temporary, a similar train of events is set in motion, but is, of course, not completely carried through. It encourages the banks to supply Command over Capital more freely for those uses from which it can readily be withdrawn, and so leads to increased supplies in the short loan market. This increase of supply, in itself, tends to a fall in the discount rate; but the anticipation of rising prices which it carries with it may so quicken demand that the rate actually rises. Conversely when, let us say, a sudden foreign demand for gold causes a withdrawal of gold from the Bank of England, its immediate effects are seen in a contraction of supply in the short loan market and a consequent rise in the discount rate. These effects result from what one might call the automatic operation of the banking machinery; they are reinforced by more conscious action taken by the Bank of England to maintain the central reserve of gold at a customary level. This last point depends on the nature of the market machinery and must be looked at rather more closely.

When a foreign demand leads to an appreciable withdrawal of gold from the central reserve, the Bank is likely to raise its official rate, contract its loans and so reduce the supply of money available in the market. As the currency issued by the Bank of England forms the main reserves of the other banks, this reduction in its amount would in time cause a reduction of their loans, not only in the short loan market but throughout the country. The ultimate effects of a persistently high Bank rate would, then, be seen in a contraction of the supply of money which would raise the value of the sovereign in England, *i.e.* lower the level of prices, and so draw in gold from abroad. Its more immediate effects would be to raise the market rate of discount, thereby making it more profitable than before for foreigners to leave their funds in London, in that way checking the outflow of gold and encouraging its inflow.

Let us return now to the original cause of the disturbance, the withdrawal of gold. If the cause of this withdrawal had been, let us say, an expansion of credit in England which had raised prices here above those prevailing elsewhere, and so made gold cheaper here than abroad, the outflow of the metal could not be finally stopped until this cause had been removed. And this cause could not be removed until the volume of purchasing power had been contracted, and the contraction had worked out its ultimate effects as indicated above in lowering the general level of prices in this country.

But the causes of disturbance with which we are concerned are temporary ones, such as a withdrawal of gold to meet a transient monetary difficulty in a foreign centre, or to pay for heavy importations of grain due to a failure of the home harvest. Such causes of withdrawal, being temporary, can and should be met by temporary means; and are most conveniently met by a temporary rise in the market rate of discount which, by encouraging the export of securities and by making it more profitable for foreigners to hold balances in London, relieves the pressure on the central gold reserve.

The effects of these temporary changes of pressure on the central reserve are, therefore, mainly concentrated in the short loan market and expressed in the form of fluctuations in the rate of discount. It is these fluctuations which we take as an index of the social cost of the changes now under consideration.

The incessant variations in the rate of discount which occur in the London Market have their effect on the one side in increasing the risks of the banks, the bill brokers and other lenders, and consequently in increasing the payment which the community is required to make them for their services. On the other side, alternations of " dear " and " cheap " money have similar effects on borrowers. The risks of merchants are increased, for they have no certainty as to the rate at which their bills will be discounted; when rates are low they can profitably extend their operations; when rates are high a part of their business is cut off. Cheap money and plentiful supply increase the means at the disposal of the speculator and tend to raise prices on the Produce Markets and the Stock Exchange. Dear money and short supply compel him to sell his holdings of produce or securities and so tend to bring prices down again. These alternations have their influence, too, on the issue of new securities. Company promoters wait for conditions in which there are low rates and a plentiful supply of funds available for speculative buyers to take up the securities they are selling; they tend therefore to postpone their issues until these favourable conditions occur, and may even create the conditions required, by arranging on their own account for an import of gold.

These disturbances, due mainly to temporary variations in the available supply of gold, though appreciable, are evidently of quite secondary importance in comparison with those which were previously discussed. It is not suggested that all the fluctuations in the rate of discount are due to this cause, but they are greatly increased by the extreme sensitiveness of the market to even small changes in the gold reserve of the Bank of England. This sensitiveness is due in a great measure to the small size of the central gold reserve in relation to the vast liabilities of the market; a partial remedy for these disturbances is therefore an increase of this reserve. A comparatively small addition to the average level of the central stock of gold would enable the Bank of England to absorb minor fluctuations and would relieve it from the necessity of continually initiating, by means of changes in the official rate, reactions which affect the market rate of discount, and so constitute a source of frequent though minor disturbances in the business of the Money Market.

The need for an increase in the central reserve has long been admitted. The practical application of a remedy is, however, now bound up with the need to provide an adequate backing of gold for the Treasury notes issued since the outbreak of war. The question is dealt with by the Committee on Currency and Foreign Exchanges after the War, who recommended in 1918 that the normal minimum amount of the central gold reserve should be provisionally fixed at £150 m.,[20] a level which has now been attained.

CHAPTER X

SUMMARY

THE manufacture of currency and the transport of capital are so closely bound up together that some account of the theory of money has been essential. The theory has been dealt with, however, only in outline, as the subject is subordinate to the main considerations of this book. It may now be summarized, partly in order to give greater unity to the argument, partly in order to bring into prominence those conclusions which bear most closely upon the work done by the market in the transport of capital.

The large volume of payments which people need to make requires that their resources should be marketable and so acceptable as a means of payment. In fact, however, land, houses and other property possess this quality only in a limited degree ; hence it becomes convenient to accumulate a supply of some thing specially chosen for its perfect marketability, to hold this as a stock and to employ it solely as a means of effecting payments. The volume of payments, present and prospective, determines therefore the fraction of their total resources which people devote to this particular use ; the quantity of resources which each person holds forms his individual demand for money, and the aggregate of these individual amounts constitutes the total demand for money. The nature of this demand requires that the stock of money produced in response to it shall have two main properties. In the first place, owing to the variety in the kinds of payments, the supply must be differentiated into various forms, each of which is specially adapted to the particular kind of payment it is required to carry through. The market responds very effectively to this part of the demand. It supplies currency in very convenient forms, and by so doing effects a marked economy in the cost and risk of making payments. The deposit currency produced by the banks is not only peculiarly adapted to carry through payments at a distance, but contributes materially, in a manner to be considered more fully later (pp. 144–5), to lowering the cost at which capital is transferred cheaply and rapidly from one point to another.

But the use of money as a means of buying goods naturally leads to its becoming the general measure of value and consequently to its being employed, not only in making present payments, but also as the unit in which undertakings to make future payments are expressed. If these undertakings or promises are to be carried through without disturbance, the unit of money must possess a second quality; it must be free from arbitrary changes in value. It is in connexion with this second consideration that the theory of money possesses such great importance and gives rise to such great difficulties.

Hitherto it has been implied that "stability of value" is the ideal condition which the unit of money should attain. This is not necessarily true. It is evident that when two parties enter into a mutual undertaking involving a future payment, one will be injured and one will be benefited if the value of the unit in which the contract is expressed varies in a manner which is not perfectly foreseen by both. It follows that stability in the value of the unit would prevent this injury from arising. But it does not follow that this would be the ideal condition; for it is quite conceivable that the unit might change in value in a manner which, though it did injury to one party, yet produced a transfer of wealth which was on the whole socially desirable. It would, however, be far beyond the need of the present argument to consider the nature and extent of the duty which could properly be assigned to the standard of value in reforming the social organization. It is sufficient to adopt the approximate ideal of stability of value, even though this term, itself, cannot be given any very precise meaning.

The means by which this stability could be attained lay, it was noticed, in the continuous adjustment of the volume of purchasing power to the volume of money work, and were considered mainly from the point of view of Supply. In actual conditions, it was seen, Supply not only failed to adjust itself to Demand, but was subject to arbitrary variations of its own. These variations were classified into three groups corresponding to the length of the period during which the disturbing cause was in operation.

The first cause, originating in changes in the profitableness of gold mining, gives rise to persistent appreciation or depression of the sovereign extending over periods sometimes so long as twenty years, accompanied by a persistent transfer of wealth from one class to another, and possibly provoking an expansion of credit. The remedy lies in assuming control over the output of gold with the deliberate object of regulating the value of the sovereign or in abandoning gold as the standard of value in favour of some composite standard specially designed to ensure stability.

The second set of causes, originating mainly in changes in the general level of confidence, gives rise to a more speedy depreciation *in the value of the sovereign. They introduce a rapid transfer of wealth which, acting as a bounty to business men, stimulates business and leads to reckless trading and investment.* But these conditions, artificially provoked, carry with them causes which lead to a destruction of confidence, and there follow, possibly a crisis, certainly a depression, with widespread and prolonged unemployment of both capital and labour. So long as the present standard of value was retained, the remedy in this case could, it appeared, lie only in suitable action on the part of those who supply the additional quantity of purchasing power which accompanies the expansion of credit. In practice, it was probably to be found in a different loan policy on the part of the banks.

The final group of causes consists mainly of the very varied and numerous influences which lead to temporary variations in the central stock of gold and thence to partial and transient changes in the value of the sovereign. The disturbances which they introduce were seen to be of a quite minor character ; a partial remedy lies in such an increase of the central reserve as would make the market less sensitive to small changes in its amount.

In dealing with the operation of the banking system (pp. 161–2), it will be argued that the practical policy adopted by the Bank of England for the protection of the central reserve may be expressed as a policy designed to eliminate fluctuations in the value of the sovereign. It is worth while comparing this policy with the action of associations of producers in regulating the price of individual commodities, with the old sliding scale of corn duties and with the introduction of import duties to check dumping ; each of which is a deliberate attempt to lessen the disturbing influence on the organization of production of fluctuations in the price of some commodity. For this comparison shows that the deliberate regulation of supply by a centralized banking system, with the object of reducing fluctuations in the value of the unit of currency, is not a unique economic phenomenon ; it is only an application to a specially important case of the general rule that fluctuations in the value of individual commodities are productive of social disturbance and that some of the causes of these disturbances may be eliminated by unified action, to the general social advantage.

The departure from an effective gold standard during the course of the war has not freed the value of the unit of money from instability arising from secular movements, from changes in the level of credit or from transient fluctuations ; it has added other sources of instability and increased the social importance of their effects.

Since 1914 a diminished production of goods and an expansion of substitutes for gold have caused the purchasing power of the unit of gold to fall to about half of its pre-war level throughout the world, and the same causes, operating more strongly, have reduced the purchasing power of the unit of currency in many countries below that of the gold to which it is nominally a title. In the United Kingdom, Treasury notes and certificates have been created to the amount of some £350 m., and bank deposits subject to cheque have probably been multiplied about two and a half times. This currency is convertible, directly or indirectly, into gold; but not into gold which can be effectively employed for purposes of industry or international payments. Being in excess of the amount required to carry through the volume of payments at gold prices, the purchasing power of each unit is depressed, and is equivalent, in the autumn of 1920, to less than three-quarters of that of the gold it represents. The connexion between the internal stock of currency and the external gold market being broken almost universally, the adjustment of the price level at home to the price levels of foreign countries, normally effected by the automatic ebb and flow of gold from and to the money stock, has ceased to operate; and the volume of the home currency, no longer automatically regulated by these variations in the reserves on which it is based, is now subject to arbitrary control, partly through the Treasury policy governing the issue of notes, partly by means of the Bank rate and partly by way of collective action on the part of the Joint-Stock banks.

In consequence of these conditions, and of their international setting, the value of the unit of currency has become very unstable and the effects of this instability very serious. The increasing production of goods, the declining output of gold from the mines and similar persistent causes are slowly changing the value of the unit of gold throughout the world. Such changes are unimportant only in comparison with influences more rapid in their operation. Working in conjunction with other causes, the policy of cautiously restricting the volume of the home currency initiated in the spring of 1920 a rise in the value of the unit of currency—in other words, a fall in the level of prices; and this tendency has been powerfully reinforced by a decline in business confidence. Declining confidence in the prospect of effecting profitable sales works, on the one hand, to reduce productivity; for in such circumstances merchants postpone orders, manufacturers fear to produce for stock and goods are released for consumption by speculative holders; and the growing depression in each industry is a cause of growing depression in all others. But, on the other hand, it works even more strongly to reduce the amount of effective purchasing power: there is a great contraction in the volume of promises to pay created by merchants' orders to manufacturers;

sooner or later the pressure on the banks for new loans declines; and currency, hitherto actively employed, is withdrawn into reserves to meet contingencies, or accumulated pending more favourable opportunities for investment. The net effect is to reinforce the initial rise in the value of the unit of currency, and to accentuate business depression; working cumulatively these various influences seem, towards the end of 1920, to be depressing general prices well below the level which may be termed normal to the general circumstances, and are causing severe social disturbance in the form of business uncertainty and extensive unemployment of capital and labour.

Superimposed on these disturbances are those due to minor and temporary causes of instability. The lack of connexion between the internal currency and the external gold market allows the value of the unit of money to fluctuate widely in terms of foreign currencies, and so adds greatly to the risks of international trade. At the same time the exigencies of Government finance set up incessant fluctuations in the supply of Command over Capital in the Short Loan market. Supply is made very variable by the alternate withdrawal and release of money in order to make immense interest payments; and, above all, by the necessity for the Bank of England to expand its loans sometimes as much as £50 m. in a single week, in order to enable the State to repay maturing debt which cannot be renewed from the general resources of the market. These fluctuations in Supply, by causing wide variations in market rates, substantially increase the risks of business in the manner already described; but the disturbances which they introduce are still of minor importance in comparison with those due to the more far-reaching influences simultaneously in operation.

PART III.—THE TRANSPORT OF CAPITAL

CHAPTER XI

THE FLOW OF RESOURCES INTO INVESTMENT

THE second main service of the Money Market—that with which this book is principally concerned—lies in the transport of capital; its importance is to be measured by its effects in facilitating the movement of capital into those uses in which it can be most effectively employed. But before proceeding to deal with the main question of the work done by the market, it is necessary to distinguish more clearly the nature of the supply of free capital, or the flow of investment, which the market transfers from one party to another as a railway transports material goods from one place to another.

As already noticed, each party to production, by virtue of the service he contributes, obtains a title to a fraction of the total national output, a fraction whose size is measured by the market value of his service. This title, converted by the use of a stock of money into an effective means of making payments, gives him a control over a defined value of social resources in general. It enables him to satisfy his present wants by consuming; that is, to draw from society's workshops things which yield up their satisfactions immediately. And it enables him to provide for his future wants by postponing consumption, or *waiting*; that is, either to direct the application of social resources to the production of things which yield up their satisfactions in the future, or to transfer to other parties, in exchange for a payment of interest, the control over resources which he does not himself wish to exercise. It is this distribution of resources between present and future uses which must first be examined. It has two aspects: first, the movement of money, which gives rise to the phenomena of the Money Market; secondly, the movement of the underlying social resources which the money movement controls. The former aspect is more appropriate in considering the matter from the point of view of the individual; the latter is more suitable in dealing with the subject from the point of view of society as a whole.

Let us consider the distribution effected by a typical business *man of his gross income, using this term to include the return which he obtains as entrepreneur for his personal services, and the* return which he obtains as capitalist from the capital he employs, without making any reduction for maintenance either of his own energies or of his capital stock. The main influence determining the extent to which he will postpone consumption, the amount of Waiting he will undertake, will naturally be the size of his income. And given the size of his income, the second influence determining the volume of Waiting he supplies will be his choice between present and future satisfactions. The general consideration by which he will be governed will be that of distributing his income among all the uses open to him in such a way as to maximize the utility which it yields him. But as each particular want is satiable, this is equivalent to saying that he will carry his expenditure in each direction up to that point or margin, at which another sovereign would yield more utility if employed in some other use; and this, again, implies that he will maximize the utility of his income by distributing it in such a way that at the margin in each direction a sovereign will yield him the same return. If we now divide these various uses into two groups, the one yielding present, the other yielding future satisfactions and consider how the one is balanced against the other we have the influences governing the volume of Waiting arising from any given income.

The relative importance of present and future goods will, of course, vary with the character and circumstances of each individual; but in each case as income is taken from uses yielding present satisfactions and devoted to uses yielding future satisfactions, the urgency of present needs increases and the urgency of future needs declines; and, conversely, as more income is expended on goods satisfying present wants, their yield of utility declines and the need to provide goods for the future becomes of increasing importance. By this process of balancing, an equilibrium will be attained which represents the attitude of the individual towards his present and future needs. At this equilibrium the yield from the pound which he thinks it just, and only just, worth while to save has to him the same importance as that of the pound which he thinks it just, and only just, worth while to spend on immediate consumption in any particular direction.

These two considerations, then, the amount of his income, and his choice between present and future satisfactions, determine the volume of the money stream which he directs (annually) into uses which meet future needs; the sum of these individual streams forms the aggregate (annual) money flow controlling those surplus energies of society which may be devoted to maintaining and adding to its accumulated wealth. This stream is not, however, *the same thing as the annual flow of investment which needs to be identified*; several limitations are necessary.

In the first place, some clearer distinction is necessary between the things which yield their satisfactions in the present and those which yield them in the future. These two groups of things have, as it were, nuclei but no boundaries; in practice they form a continuous series, the one merging imperceptibly into the other. The service of a barber is consumed as it is produced; resources in the form of clothing constitute a stock of services yielding their satisfactions only during a period of time; those in the form of raw materials and industrial plant yield their satisfactions more remotely still; while the stock of services in buildings and similar durable goods are yielded only in the course of long periods of time. The line of division in this series must be drawn with reference to the purpose in hand. The present purpose is to distinguish the stream of resources devoted to use as capital, using the term "capital" in the ordinary business sense to include all those things (other than land) which are employed for the purpose of earning that part of income which is commonly reckoned in terms of money. In considering the distribution of income between the present and the future, therefore, we may, for present purposes, reckon that an individual "consumes" in so far as he exercises his control over resources to obtain food, clothing, furniture and other things intended for personal, as distinct from business uses; and that he postpones consumption, or waits, to the extent that he exercises this control to increase his "capital," either by directing resources into his own business or transferring them to other parties in exchange for a rate of interest.

The flow of resources directed into these latter uses forms the stream of Waiting proceeding from each individual; but it does not correspond, at any rate during short periods, to the stream of individual investment. In order to bring out this point clearly, let us return to the case of a typical business man. His capital consists of resources invested in various special forms: a stock of money which facilitates his transactions; a stock of raw materials to be embodied in his saleable products; a stock of machinery and other plant which assists him in their manufacture, and so on. Suppose that in the course of the year he saves and accumulates a stock of money in excess of that which he needs to carry out his business transactions. In one sense he is investing, in another sense he is not. Without investigating the niceties of this question, we must reckon that when he acts in this way he adds to his wealth, but not to his capital; that he waits but does not invest; for otherwise we lose sight of the great difference between the social effect of accumulating control over resources and that of employing that control to set resources in motion. This distinction between Waiting and Investment is obvious enough; but it is of considerable importance and will be taken up again a little later.

Allowance being made for duplication, the sum of these money streams proceeding from individuals during the course of the year forms what we may call the aggregate money stream of individual investment. It constitutes the annual flow of Command over Capital and controls that part of the productive capacity of the country which is devoted by individuals to maintain and add to their individual stocks of capital.

A part of this stream is applied directly by its owners in replacing and increasing the equipment of their businesses; the remainder forms the supply of "capital," which is transferred to other parties by the machinery of the market. It must not be overlooked that this remainder is in appearance multiplied by being passed, in many cases, through the hands of several intermediaries; as, for example, that which is lent by the public to the banks, by the banks to the bill brokers and by bill brokers to merchants; but this consideration does not affect the substance of the argument.

That part of the stream which is transferred in this way to other parties is employed in a great measure in the maintenance and extension of business enterprise at home and abroad. But it is not all so employed; for among the borrowers in the market are many who bid for the use of resources for the purpose of immediate consumption. Resources transferred to the control of spendthrifts, Governments, Municipalities and other parties at home, who employ them in consumption, are recorded as debts, which constitute capital from the point of view of the individual investor but not from that of society as a whole.

This consideration leads to a distinction between the aggregate stream of individual investment and the stream of social investment. The latter is obviously the smaller of the two; it represents the resources annually applied to maintain and increase the stock of capital of the community regarded as a whole, that part devoted to *increasing* this stock constituting the stream of net social investment.

We have then three streams of money payments: first, the aggregate stream of individual investment, representing the whole of the resources annually applied by individuals to maintain and extend what from their point of view is capital; secondly, that fraction of this stream which represents resources transferred, by the agency of the market, to the control of other parties; and thirdly, that part of the stream which represents the fraction of the productive capacity of the country annually applied to increase the stock of capital of the community as a whole. A little must be said with regard to the size of these streams, the regularity of their flow and the work done by the market in facilitating and directing the movement of the particular stream passing through its hands.

First, as to the size of these streams. "The flow of investment of resources for future needs," says Dr. Marshall,[21] "consists of two streams. The smaller consists of new additions to the accumulated stock: the larger merely replaces that which is destroyed; whether by immediate consumption, as in the case of raw material, fuel, etc.; by wear and tear, as in that of railway irons; by the lapse of time, as in that of a thatched roof or a trade directory; or by all these combined. The annual flow of this second stream is probably not less than a quarter of the total stock of capital, even in a country in which the prevailing forms of capital are as durable as in England." The size of the former stream in 1914 was probably in the neighbourhood of £350 m. per annum. The size of the latter is at first sight astonishingly large; but its magnitude is less surprising when it is remembered how large a part of the capital employed in industry, and especially in trade, consists of coal, metals, textiles and so on, in the various stages of manufacture through which they move in their passage to the consumer. The large proportion of resources annually devoted to replacements evidently does much to explain the great adaptability of industry and trade to the constant changes of demand which it is called upon to face.

Inasmuch as the stream of money payments into investment uses involves a corresponding movement of the social resources which it controls, it is evident that marked irregularities in this stream may be a source of important social disturbance. Mr. C. K. Hobson's estimates[22] of the export of capital show that the volume of foreign investment varies widely from year to year, but little or nothing is known statistically of changes in the annual volume of home investment. Nevertheless there are certain general considerations bearing on the matter which may be noticed.

The primary influences affecting the annual volume of the stream of investment are evidently those which govern the power and the will to save; those due, on the one hand, to growing productive capacity, variations in the bounty of nature and in foreign demand, trade disputes and so on; and, on the other, to modifications of outlook leading to habits of thrift or extravagance. Such influences, acting through the volume of Waiting upon the stream of investment, cause a shifting of resources to or from constructional and exporting industries from or to industries which minister to present needs. It would be of some interest to consider how far these influences are sufficiently powerful and rapid in their operation to strain the adaptability of the industrial organization and to form a cause of social disturbance; but the matter is too large to be dealt with here.

We may pass on, then, to consider the nature of the disturbances which arise from a secondary cause; namely, differences in the rates at which waiting and investment proceed.

In modern conditions, some people who wait, or save, apply their savings as they accrue to the repayment of bank loans or other debts, to the expansion of their businesses and to similar uses; in such cases saving and investing proceeds concurrently and no difficulty arises. But other people act differently; they may save continuously, but they invest only after a period of accumulation when a favourable opportunity occurs. When they act in this way, they withdraw currency from active circulation, mainly by accumulating, at their bankers, lodgments which would otherwise be employed as a means of making payments—as orders for the production of goods. The total volume of bank lodgments remains unaltered, for the banks are not affected by such transfers; but lodgments are shifted from people in general and heaped up on the accounts of particular individuals; in effect, money is being hoarded. As a result of this action, a part of the cheque currency by which social resources are controlled is withheld from active employment, and two consequences follow. The immediate effect is that, in consequence of fewer purchases, of a smaller effective demand for goods, production slows down. A second effect is a general fall in prices, which tends to proceed until the diminished quantity of money in active circulation again controls and sets in motion the whole supply of social resources. It seems clear that this latter compensatory effect must proceed more slowly than the former and that in the interval during which it is proceeding social resources are imperfectly employed. In other words, in spite of the banking system, variations in the interval between saving and investing are, or may be, causes of fluctuation in the employment of capital and labour.

This conclusion would be of no importance if the actions of investors were independent of one another; in that case, the absorption of money by some individuals would be set off by the release of money by others; a part of the money stock would be out of action, but this amount would be tolerably constant and saving and investment would proceed concurrently. But such an assumption does not correspond to the facts; for investors are moved largely by common causes. They are affected alike by variations in the costs associated with Waiting: that is to say, by changes in the facilities for marketing their capital; and above all by changes in the current estimates of risk, or more broadly, in the general business outlook. Such changes, therefore, are a cause of variations in the money stream of investment and of disturbance in the resources which that stream controls.

Goschen * drew attention to the powerful influence of the rapidly developing Trust and Finance companies during the '60's in directing capital from home to foreign investment; that is to say, from industries which supply capital goods for home use to exporting industries which supply the needs of other countries. Booms in rubber planting, gold production and similar speculative undertakings form more recent instances of the manner in which changes in a local business outlook affect the stream of investment into particular industries and encourage wide fluctuations in their activities.

A more important and more interesting question is the manner in which the money stream of investment, by varying under the influence of changes in the general level of confidence, contributes to the intensity of business cycles. An improved business outlook, accompanied by rising confidence, increases the demand of business men for Command over Capital; for it urges them to borrow in order to exploit the more favourable opportunities for profit. At the same time, it increases supply; for it reduces the investor's estimates of risk and opens up many new opportunities for the profitable employment of his capital. In such circumstances it is hardly possible to doubt that the money stream of investment proceeds even faster than the rate of saving, and that its change of rate produces the twofold effect already described.

It increases the activity of the constructional and other industries which give effect to social investment and it throws additional supplies of money into active circulation, thereby encouraging a rise of prices and reinforcing the rising level of confidence which is the immediate cause of growing business activity. Conversely, low or declining confidence in the business outlook is emphasized by its influence on the action of the investor. The rate of investment lags behind the rate of saving; money is thereby withdrawn from active circulation; and a fall in the effective demand for goods, accompanied by declining prices, yields its special contribution to the disorganization of the relations between producers and consumers which marks a period of depression.

The immediate conclusion, then, is this. In the long run the stream of waiting, or saving, is identical with the money stream of investment; and changes in the volume of the one tend to produce corresponding changes in the volume of the other. Such changes cause a diversion of social resources; only when they are rapid, however, are they likely to produce any social disturbance. But the money stream of investment varies also, locally or generally, with changes in facilities for marketing and in estimates of business risks. General changes of this kind contribute to the social disturbance produced by business cycles; partly by increasing the rapidity with which resources are diverted to or from the production of capital goods; partly by adding to the stock of active money when confidence is high and prices are rising, and taking from it when confidence is low and prices are falling.

The money stream of investment with which we have just been dealing includes that part which is transferred to other parties by the agency of the Money Market. In a final chapter something will be said with regard to the comparative size of this latter stream; at the moment we are concerned with the work done by the market in facilitating and directing its movement. That work must be judged by its effects in enabling capital to move rapidly and economically to the points at which it yields the highest return. It lies partly on the side of Supply, partly on the side of Demand; on the one hand it lowers the supply price of capital; on the other it assists in the formulation of demand. In the following chapters, therefore, the composite supply price of capital is broken up into its three elements, the prices of pure waiting, of risk-bearing and of marketing, with a view to considering the work done by the market in reducing their amount; next, some account is given of the assistance provided by the market in the formulation of demand; finally, each of the individual agencies composing the market is briefly reviewed with the object of bringing out the characteristic features of its work in promoting the distribution of capital in accordance with the social interest.

CHAPTER XII

THE INFLUENCE OF THE MARKET ON THE SUPPLY OF CAPITAL

WAITING

THE many forms of human exertion put forth in production are separable into two kinds — Working and Waiting. There seems to be no fundamental difference of nature between the two; for the qualities of character required in some parts of business management are closely similar to those exercised in saving. The distinction must be justified less by the nature of the exertion put forth than by the nature of the product or service to which each gives rise.

The term Working conveys a clear idea to the mind largely by its very ambiguity in implying not only the cost, *i.e.* the exertion which it involves, but also the corresponding service, *i.e.* the work done as the result of that exertion. The term Waiting, on the other hand, leaves only a shadowy impression on the mind. This seems to be due partly to the fact that the term refers only to the cost, *i.e.* the exertion involved, and does not suggest the corresponding service, the supply of Capital; and partly to the fact that this service is itself somewhat obscure. It will be worth while to define the nature of Waiting rather more exactly than has yet been done in order to bring out its social significance, *i.e.* the cost which it involves and the social economies to which it gives rise.

As a preliminary we may define Waiting simply as ***postponing consumption***; or, with the object of indicating both cost and service, as ***abstaining from the use or enjoyment of some thing of value in the present in order to obtain its use or enjoyment in the future.***

In this definition the cost of Waiting is implied in the postponement; while the economic service of Waiting appears in the effect of the postponement, namely, in some thing of value or, more generally, some quantity of resources, being preserved from consumption and consequently made available for use.

As, however, the Money Market deals in terms not of things themselves but of their common money measure, it is convenient to express the service or product of Waiting in those terms, so that it becomes a measurable thing of two dimensions, a quantity of value for a period of time; £500 supplied for one year being regarded, generally speaking, as equivalent to £100 supplied for five years. Waiting, then, liberates a quantity of value for a period of time; it makes available for social use a control over social resources—*a quantity of what strictly should be called "command over capital," but is more generally known as "free capital" or* simply "capital." Inasmuch as exertion is needed for its production, the supply of capital is limited; inasmuch as it may be employed to effect real social economies it is in demand; accordingly the use of capital has a value and may be marketed at a price known as the net rate of interest.

The costs of Waiting consist in all the exertions required to give up certain enjoyments in the present in exchange for the prospect of certain other enjoyments in the future. These exertions vary greatly with circumstances, but may often be more severe than those of Working; they comprise not only the exercise of considerable imagination in order to recognize the needs of a distant future and to balance them against the more vividly presented demands of the present, but also the continuous self-control required to give effect to this recognition. When a workman is saving a fraction of his wages, the reality of his exertion is very apparent. At the opposite extreme of the income scale, when the heir to £5000 a year abstains from consuming his capital, his Waiting will always involve the exercise of some imagination and self-control to set bounds to his expenditure and save him from the fate of the spendthrift; but although this Waiting will be on a vastly larger scale, the total exertion he puts forth may well be much less than that of the workman.

If these two parties invest their capital, the money reward, *i.e.* the interest, received in the two cases will obviously be in proportion not to the exertion put forth but to the quantity of Waiting supplied. It follows that there is frequently a wide disproportion between effort and reward; the rich wait with ease, the poor with great difficulty; and each is paid the same price for each unit of capital supplied. If justice requires that material reward shall be proportioned to exertion the present method of payment is evidently unjust. It must be noticed, however, that Waiting is paid for on just the same principle as is Working and that, in this respect, the two stand or fall together. The man of great natural endowments is paid out of proportion to the exertions involved in his Working—the leading tenor gets many times the salary of the stoutest voice in the chorus—just as the man who inherits great wealth gets paid out of proportion to the efforts involved in his Waiting. Material rewards are paid by society not in proportion to efforts or worthiness but in proportion to the value of services rendered; a system whose defence rests less on its immediate justice in individual cases than on its general effectiveness in calling forth appropriate quantities of the various kinds of service which society requires to satisfy its multitudinous needs.

The market, then, lays stress not on cost, but on supply; not on postponement, but on the result of postponement, the capital thereby made available for use. The important question is therefore to distinguish the nature of the economies which are produced by capital and by virtue of which its use commands a price on the market.

As we have seen, Waiting, the postponement of consumption, places at the disposal of society a quantity of capital by means of which the party employing it obtains a control over a quantity of resources applicable to any use he chooses. For this capital there is a twofold demand corresponding to two distinct kinds of uses to which it is applied: first, it enables goods to be "carried" from an earlier to a later point of time when they may possess a higher value from their ability to satisfy a more urgent need. This additional value, one of the sources from which interest is paid, is the measure of an economic benefit or service arising from what, for the purposes of this chapter, may be called the Consumption demand for Waiting, or Capital. In the second place, it may be employed in a manner which adds to the efficiency of human effort and consequently yields a surplus, a net addition to its own amount. This addition of value, the second source from which interest is paid, is the measure of a second economic benefit from which arises what, for present purposes, may be called the Production demand for Waiting. The nature of this double economy which forms the source of interest must be considered more fully.

THE CONSUMPTION DEMAND

The Consumption demand for Waiting calls forth a service which is closely analogous to that involved in a trading operation. The trader carries a thing of value from some point in space where it is relatively little needed to some other point where the need for it is more urgent; and he draws his profit from the additional value which this thing acquires as a result of its transfer to the latter place. Similarly a person who waits enables some thing of value to be carried from the present, a point of time in which it satisfies a relatively small need, to some point of time in the future when it is likely to satisfy a greater need; and he draws interest, or its equivalent, from the additional value which the thing acquires as a result of its transfer to the later point of time. The one carries through space, the other through time; each increases the utility of the thing carried by transferring it to a point where it is more urgently needed; and each draws his reward from this increase of utility.

A primitive instance of Waiting for these purposes is given by the squirrel who stores nuts for winter food. He is concerned only to carry a quantity of food from a time of plenty to a time of expected scarcity; and he draws an equivalent of interest in the increased utility of the food at the later date, that is to say, from its ability to satisfy a more urgent need. In business conditions these operations are carried out in terms of money, and the corresponding case becomes that of the thrifty person who saves, say, £1000 in order to provide for the needs of his old age. If he simply stores this money in a stocking, he will, if he has estimated wisely, obtain a considerable reward for his Waiting from the increased utility which the £1000 yields him at the later date. This reward is essentially interest, although it is not paid by another party and is not expressed in terms of money.

The capital resulting from Waiting is, of course, not necessarily used by those who waited and produced it, as in the simple instances just quoted; it may be transferred to others through the agency of the Money Market. The first and most obvious part of the consumption demand for capital expressed in the market is that arising from those who wish to consume now instead of later. They feel their present needs to be more urgent than those of the future; they desire to *anticipate, i.e.* to exchange the future for the present, and they do so by obtaining the use of capital from those who wait, *i.e.* who exchange the present for the future. Governments who borrow through the agency of the securities markets for such purposes as war, and spendthrifts who borrow on mortgage through the agency of solicitors in order to enjoy now instead of later obtain a considerable, and at times a very large share, of the annual supply of free capital.

Resources so applied are destroyed; they add nothing to the capital stock of the community regarded as a whole. This does not mean, of course, that the Waiting which freed those resources for social use has been fruitless. Apart from the advantage gained by those who waited, the capital they supplied served a purpose by enabling others to transfer a power to consume from a time of less to a time of more urgent need, thereby making a net gain of utility, a part of which was paid over in the form of interest to those who waited.

A second part of the consumption demand arises from those who wish to employ capital in the way of business to effect precisely the same kind of economy. Wholesale merchants borrow from the banks in order to distribute wheat and other agricultural produce through the year in a manner which increases the utility it yields ; retailers need capital to carry the stocks of finished goods with which to meet the needs of the public as they arise. Waiting *employed in this way is not cancelled by Anticipation ; it increases* the capital stock of the community and earns interest by enabling goods to be carried to those points of time at which the demand is keenest.

We may then conclude that Waiting in response to the Consumption demand is a service which consists simply in enabling things to be carried to the points of most urgent demand ; the product of this service being the additional utility which these things acquire from the transfer ; and this increase of utility forming the first of the two sources from which interest is paid.

THE PRODUCTION DEMAND

The Production demand for Waiting springs from a source quite distinct from that described above ; it arises from purely technical conditions in connexion with processes of production, and has become of increasing importance since the advent of the Industrial Revolution.

In parts of the world where the bounty of nature is very rich, groups of people whose wants are simple may be able to satisfy their immediate needs without putting forth anything in the nature of Working or Waiting ; in such conditions the question of a cost or supply price of the things which satisfy these immediate needs does not arise ; for they are obtainable practically without exertion and there is enough for all.

When, however, the bounty of nature is inadequate, and hunger and cold can be alleviated only by hunting and fishing, work becomes a necessary preliminary to the use of furs and meats ; food and clothing can be acquired only at a cost. In such circumstances these simple economic goods will acquire an exchange value, for their supply will involve costs of production, and these costs may be said to consist simply of labour, of Working.

But with the advance of knowledge and the increasing complexity of wants which accompany development towards the conditions of modern communities, production operations change their character ; Working ceases to be the sole element of cost, and Waiting, an element formerly imperceptible, becomes of increasing importance among costs of production.

The cause of the introduction of this new element is of course simply economy and the cause of this economy is simply that the addition of Waiting to Working permits the adoption in many productive operations of alternative methods of higher productivity.

An illustration of this change of method with its accompanying increase in productivity may be taken from the case of the fisherman.

We may suppose the fisherman in primitive conditions to be working practically without appliances and to be consuming the products of his Working forthwith; and, if we compress a period of slow evolution of knowledge into a point of time, we may suppose further that he is at the same time aware of an alternative and more effective method of obtaining these products by means of boat and nets. Suppose him then one morning to resolve to change from one method to another. Accordingly he decides to continue temporarily in his present ways, but to save, say, one-half of his produce for fifty days and to pay this to some other party to manufacture for him the boat and nets he requires. At the end of this period he adopts the second method of production, and his daily produce, we may very reasonably suppose, shows a net increase of 20 per cent.

The question to be answered is—to what is this additional produce due? It is not due to increased Working on his part under the second method; for, although the character of his efforts may have been changed, it may quite fairly be assumed that they are on the whole no more arduous or difficult than before. It is not due to increased working during the fifty days, for his work during this period underwent no change and his product was the same as before. It is not due to the increased Working of the other party; for that other party has obtained fish indirectly by making boat and nets, instead, perhaps, of producing fish directly on his own behalf. Only one thing has changed; one further thing has been done. The fisherman has abstained from consuming the products of fifty half days' labour; these products constitute "free capital"; they give him a "control of resources" which he devotes to the construction of the capital goods, boat and nets, thereby increasing the volume of his daily products. He may when he chooses re-exchange those tools for fish and enjoy the consumption he has postponed, but so long as he continues to postpone consumption, *i.e.* to Wait, his daily product is increased by 20 per cent.

It is clear, therefore, that the difference between the productivity of the first and second methods of production is due simply to Waiting. This difference constitutes the Production demand for Waiting and is the second source from which interest is paid.

The scope for the employment of Waiting in production uses evidently depends on technical considerations; it depends on the methods of production which have been discovered and on the extent to which the adoption of the most efficient of these methods is facilitated by the use of a "quantity of value for a period of time." Its contribution to productive capacity varies then with the technical conditions of each trade and industry, ranging from a position of insignificance in the industrial operation of a washerwoman, through one of considerable importance in, let us say, cotton-spinning, to one of predominance in the case of ocean transport. In some operations roundabout methods offer little advantage ; in others they yield enormous economies.

When capital is employed to allow a stock of wine to mature, a crop to ripen, or a forest to grow, its function is simply that of enabling a period of time to be interposed between human effort and its reward, during which period the forces of nature operate to produce a result unattainable by more immediate methods. The more typical use of capital is, however, to enable business men to adopt lengthy and roundabout modes of production when these are more efficient than more direct and immediate methods of attaining a similar end. It would be possible, for example, for business men to carry out their transactions by paying away their own products in the purchase of the various goods they require ; but in fact they do not do so, because they can carry through their transactions far more efficiently by adopting a roundabout method : namely, by exchanging their product for money, holding a part of their capital as a money stock and employing this stock to effect their payments, the economy so effected more than outweighing the loss of interest on the capital so employed. A clearer example is given in the comparison between two methods of transport, the one by coolie involving only Working, the other by means of a railway, involving both Working and Waiting. By the second, roundabout method, the operation of transport is carried out in two stages : in the first stage Waiting provides the food, clothing, etc., which enables Working to be applied to the production of a slowly made intermediate product, the railway ; in the second stage the railway, whose cost is borne solely by Waiting, is joined with more Working to produce transport services vastly more economical and efficient than those of a similar quantity of unaided labour. The increased efficiency of labour, due to the assistance of Waiting, yields a surplus over the results of the direct method which constitutes the source from which interest is paid.

We may conclude then that the act of Waiting is an act of postponing consumption which releases for social use a quantity of value for a period of time ; its product is a supply of capital, the control over a quantity of social resources, which may be employed by the party who waits, or transferred to some other party through the agency of the Money Market. The use of this capital introduces two distinct economies ; it increases the efficiency of consumption (if the expression may be permitted) by enabling things to be carried to those points of time at which they satisfy the most urgent (money) demand; it increases the efficiency of production by making possible the adoption of methods of higher productivity; in each use it yields a net gain of utility which is the source from which interest is paid.

The annual supply of free capital, the stream of resources seeking investment, is partly applied by its owners to maintain and extend their own business operations, partly transferred to other parties through the agency of the market. In either case the Waiting from which this capital arises is inseparably bound up with other (real) costs.

When the investor employs his capital in his own business his Waiting is associated with the exercise of the business ability required for the management of his undertaking. When he transfers his capital to the control of other parties, " work of management " is still necessary both for dealing with the risks to which the capital is exposed and selecting the employment in which it may be expected to yield the highest net return. It is mainly by separating Waiting from this work of management that the market exerts so powerful an influence in increasing the volume of Waiting annually supplied. It does so in two ways.

The market agencies themselves may assume, in part or in whole, the work of risk-bearing and marketing, and by their expert knowledge and wide business connexions greatly increase the efficiency with which it is done. Deposit and Savings banks take over the whole of this work from the investor, relieving him of all but the service of Waiting. Trust and Investment companies (cf. pp. 118–21) relieve the investor of part of his risks and most of the work of marketing; they open for him an immense and otherwise inaccessible field for the profitable employment of his capital. The Jobber's " turn " and the Broker's commission are payments for work of management which few investors would care to undertake themselves.

A second method, similar in principle, is that adopted by Issue Houses, company promoters and so on in the sale of securities to the public. The stocks and shares which they market are differentiated in adaptation to the needs of different types of investors: some such as mortgage debentures are so devised as to be almost free from risk; others such as preference shares bear limited risks; others such as ordinary shares have concentrated on them most of the risks of the undertaking they represent.

It is easy to see that these two methods are no more than special applications of a very general principle. Just as the complex operation of producing goods is separated into its simpler processes and these processes assigned to specialized classes of workpeople, business men and capitalists, so the complex service involved in the supply of capital is separated into its elements and each elementary service assigned to the party who will supply it most cheaply. The effect of the application of these methods, on the supply of capital and the development of industry, can hardly be estimated; but it seems clear that if each investor were required to deal himself with the risks and trouble of marketing his capital, the annual supply of Waiting would be only a small fraction of its present amount. In the following chapters the economies effected by the market in that part of this work which they take over from the investor are examined in more detail.

CHAPTER XIII

THE INFLUENCE OF THE MARKET ON THE SUPPLY OF CAPITAL

RISK

FOR the sake of simplicity Waiting has been dealt with as though it were a distinct and independent service; in fact, however, as Waiting essentially implies the carrying of some thing of value from the present to the future, its supply, as already noticed, is necessarily associated with that of another and quite different service. As the value of the thing carried depends upon the events of a future never perfectly foreseen, that value is subject to change uncertain both in kind and degree. Accordingly anyone who Waits, or carries any thing of value through time, must accept the risk of change to which its value is exposed; in other words, the service of Waiting is essentially bound up with that of bearing Risk.

Given a complete knowledge of the future, it would evidently be possible to make a much more exact and delicate adaptation of economic means to economic ends than is practicable in the circumstances in which business is actually carried on. In such a condition volcanic eruptions would destroy only that property which awaited demolition; hailstones would fall on crops and leave their value unaffected; changes in wants would coincide with the decay of the industrial plant which served to satisfy them; the terms gain and loss would be deprived of that greater part of their significance which is derived from the presence of chance.

In actual fact, however, not only can the changing environment of the future be foreseen only very imperfectly, but the present environment itself is inadequately known. Consequently the adjustment of means to ends is at best only a succession of approximations. Incessant change in the extent and kind of wants is followed by incessant readaptation of industrial machinery; and the cost of imperfect knowledge is a continuous maladjustment, which lowers the efficiency and therefore the productivity of resources, and gives rise to a continuous social loss.

The amount of this loss depends on three things: (1) the rate of social change; (2) the degree of imperefction of knowledge;

and (3) the extent to which resources are fixed and unadaptable, *i.e.* the immobility of invested resources.

The rate of social change is evidently important. A Republican victory in the United States of America is thought perhaps to foreshadow trust and tariff legislation. A typical effect would be that prices of certain stocks tend to fall; in other words, people will not buy those stocks, and new capital will not flow into the industries which those stocks represent, until the rate of return rises by an amount which will cover the cost of bearing the additional risks which have been introduced. Again, capital invested in plant for the production of fashionable goods must normally yield a higher rate of interest than capital applied to produce goods of more stable consumption; the additional charge for interest increases the cost of the goods sold to the consumer and is, as it were, the price, or at any rate a part of the price, of the more rapid social change. Instances could evidently be multiplied, were it necessary, to show how great is the waste introduced by the presence of unforeseen change.

The future may be controlled to some extent by the development of stable political institutions, by laws for the enforcement of contracts, and by the growth of morality which increases the stability of business relations; uncertain future events may be set off against one another by the operations of Insurance companies, and liability may be limited by special legal devices. Nevertheless, there remains a ceaseless and increasing change which may often consist in the introduction of new inventions and of improved processes, but, in itself, adds greatly to the risks of invested resources and constitutes a very important element in costs of production.

The second determinant of the amount of risk which is borne by a society is the extent of ignorance, without which change (from this point of view) is harmless. The social machinery for dealing with this ignorance by collecting and distributing intelligence is extensive and elaborate. The Meteorological Office increases the efficiency of resources employed in navigation and agriculture; the speculative produce markets publish anticipations of the future in terms of price quotations, and by so doing co-ordinate supply and demand more closely; while many thousands of people specialize in the collection of information bearing on the present conditions and future prospects of business undertakings throughout the world. The commercial and financial articles and market reports annually published in the periodicals of the U.S.A. alone would, it has been estimated, make nearly two hundred and seventy-one millions of books of the size of *David Harum.*[24] All this intelligence, distributed by the technical and general press, must diminish very greatly the risks of investment or, more generally, the wastes arising from the maladjustment of social resources.

Given, then, the rate of change in a society, and also the state of knowledge, the amount of risk depends upon a third factor—the degree of mobility of invested resources. Evidently the losses inflicted by unforeseen change, whether they proceed from the introduction of new methods of production, from changes in taste or from political upheavals, will depend very closely upon the power to recover or to readapt the form of the fixed capital which was adjusted to the necessities of the original economic conditions. Every increase, therefore, in the amount of fixed capital used in a production process or in the degree to which it is specialized diminishes, *ceteris paribus*, this power of readjustment to changing circumstances and increases the amount of risk associated with the production process in question. When resources are invested in the construction of a highly specialized plant, or when a workman spends many years in acquiring skill and speed in performing some delicate specialized process, the risk of loss on the capital invested is evidently far greater than when plant and personal abilities, being less highly differentiated, can be diverted to other uses as circumstances require.

Although, therefore, it may be hardly possible to prove the fact inductively it is impossible to resist the inference that the more permanent and highly specialized are the forms in which resources are embodied, the higher, other things being equal, must be the rate of return on these resources, in order that adequate compensation may be received for the additional risks which permanence and specialization introduce.

These three determinants of the amount of risk borne by a society are interdependent, but they represent distinct sources. It will be convenient to deal with the first two together under the heading "Risk arising from Imperfect Knowledge," and then, assuming the imperfection of knowledge to be given, to pass on to a consideration of the additional risks introduced by the immobilty of resources. We recognize, therefore, two main sources of risk and deal with them in successive chapters.

CHAPTER XIV

THE INFLUENCE OF THE MARKET ON THE SUPPLY OF CAPITAL

1. Risk arising from Imperfect Knowledge

A STOCK EXCHANGE list for April 1914 gives the yield at current prices of the two kinds of stock issued by the United States of America Steel Corporation; the Preference Stock yields £6, 6s. per cent, the Ordinary £7, 15s. per cent. As each of these stocks has a large and active market, so that the ease of buying and selling is practically the same in the two cases, the difference in yield of £1, 9s. per cent must be regarded as a payment for the additional risk borne by the holders of the Ordinary Stock. This difference of yield of which we are speaking is not, of course, based on the rates of return on the original capital, but on the rates of return which would be obtained on capital invested in the two kinds of security at current prices. The presence of this difference is quite in conformity with the accepted opinion that risky securities must pay a higher rate of return than others; but the nature of the service for which this additional payment is made is less evident than at first sight it appears.

It seems often to be considered that this additional yield is a kind of bonus which appears in good years as a compensation for low dividends in the past or an anticipated decrease of yield in leaner years to come, that is to say, that the additional yield is a kind of amortization fund which just serves to cover losses in the past or future. This view must be true in part; for capital invested, for example, in shipping, where it is exposed to a possibility of loss, must yield a return which would be sufficient in the long run to make good this loss. If, however, the additional yield merely compensated for losses, it is evident that in the long run the return on risky securities would be exactly the same as the return on those which were perfectly safe, a view which is not borne out by the facts and is in conflict with accepted opinion.

Suppose for the moment that this theory were true, and that the public would hold risky stocks for the same average return as it could obtain upon others. Now in the case of such stocks as those of sound, old-established railways the long records of the dividends paid give in normal times a good experience on which to base an estimate of their future behaviour. Sound Preferred Stocks, bearing a fixed rate of interest, may be expected to continue that yield during any period the investor is likely to take into his calculations. The corresponding Ordinary Stocks, the yield on which fluctuates more closely with the fortunes of the railway, may be expected to pay the same average return as before, for there would seem to be no greater chance of the yield sinking to nothing than of its rising to double the average rate. On the present assumption, therefore, it would be expected that the opinion of the market, corrected by its past experience of these securities, would set the price of the Ordinary Stocks at a level which would make their average yield equal to the average of the fixed rates paid on the Preferred Stocks; that is to say, that the anticipated yield on £100 invested at these prices in Preferred or Ordinary Stocks would be the same in amount and would differ only in the fact that in the case of the former the yield was comparatively fixed and certain and in the case of the latter the yield might fluctuate widely about the average.

In fact, however, this is not the case. Current prices of Ordinary Stocks, not only of railways but of other old-established companies, are set at a level which makes their current yield higher than that on the Preferred Stocks. It would appear, therefore, that a higher average return is expected from the Ordinary Stocks and that in fact capital invested in certain classes, the risky classes, of security is expected to obtain a *permanently* higher rate of return than capital invested in other classes of security where the return is quite certain, a fact which is quite unexplained by " Risk " in the sense in which it seems frequently to be employed.

There must therefore be present some deterrent, some disutility, attaching to the supply of capital in these particular classes of risky security, which checks the flow of capital into them and thereby raises their rate of return by an amount which constitutes the market price for bearing this disutility, *i.e.* this additional element in the supply price of capital. This deterrent to the supply of capital can arise only from the fact that people do in general dislike the uncertainty in the yield of risky investments even though experience may show that in the long run these investments will yield them a return equal to that derived from other classes of investment. The disutility in question therefore arises from the presence of Uncertainty, and the service for which this additional return is paid is the service of bearing Uncertainty.

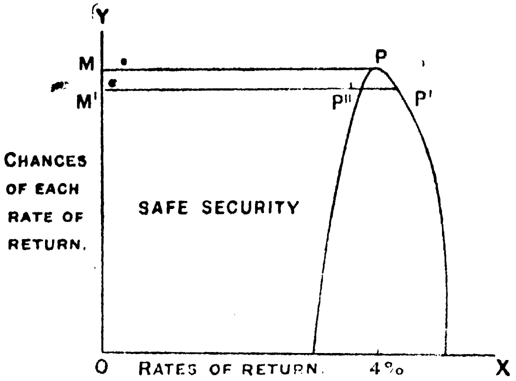
The supply of capital in risky investments would appear therefore to involve the bearing of Risk, in the sense of an unrelieved probability of loss, and the bearing of Uncertainty, in the sense of irregularity of return; the presence of the one being very generally taken for granted, the presence of the other being suggested, though hardly proved, by the foregoing discussion. Both these ideas may be run together in a conception developed by Professor Pigou in his *Wealth and Welfare*, a conception which so completely satisfies the mind that it requires explanation rather than proof. The essence of the matter lies in the idea that the presence of risk in any venture checks the flow of capital into that venture until the rate of return rises and there appear chances of exceptional gain which compensate for the chances of loss and the uncertainty of the return. A risky investment differs from a safe investment therefore in offering not a single fixed and certain net return but a range of prospective net returns. This must be considered more fully.

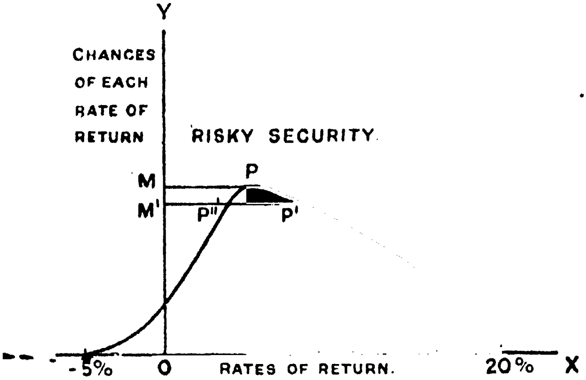
Suppose a capitalist to be making his choice between investment in two securities, the one practically safe, the other risky. Suppose him also to neglect future capital value and look only at future yield—this he may quite properly do, for the two are bound together by the rate of interest and move symmetrically. When he contemplates the safe security and looks at its future yield he estimates perhaps that he is practically certain to get a net 4 per cent, but that there are a few chances of his getting 3 per cent, and about an equal number of chances of his getting 5 per cent. When, however, he regards the probable yield from the second and more risky security he estimates perhaps that while there are most chances that he will get 5 per cent, yet there are a varying number of chances of his getting anything from − 5 to + 20 per cent.

These two sets of conditions may be represented by curves of "prospective net returns." These curves are drawn separately for the two securities. In each case the prospective rates of return on the sum invested are measured along OX and the number of chances of each rate of return is measured along OY; thus the most frequent return MP is likely to occur OM times. In each case the "spread" of the curve represents the amount of Uncertainty in each investment or venture for which it is drawn. The average return which may be anticipated, *i.e.* the estimated actuarial value of the set of prospective returns, may be shown by drawing M′P′; then if we mark off the length M′P″ equal to the net rate of interest (in the generally accepted meaning of the phrase) the difference between the two, *i.e.* P″−P′, represents the payment for bearing Uncertainty.

This conception is complicated by the difficulty of defining the degree of knowledge to be presumed in forming the estimates of the prospective net returns proper to any venture; for its prospects will present themselves in a different form to each individual investor. For present purposes it will be convenient to conceive the curve to be drawn in the light of the knowledge possessed by well-informed parties in the market. That being so, we may regard the actuarial value of its set of returns as a measure of its true social title to be supplied with the capital of which it is in need.

When these prospective returns are very widely spread; when,





for instance, as in lotteries and untried gold mines there are a few chances of immense gains and many chances of none, it may be that the attractive power of the curve will be so great that capital will flow into the venture when the actuarial return M'P' is below the net rate of interest. In such cases there is no payment for bearing Uncertainty, or rather the payment is negative, for M'P' is less than $M'P''$. It must be admitted, however, that in general people dislike uncertainty in the return on their investments, and accordingly that if capital is to flow into any undertaking the estimated actuarial value of its curve, $M'P'$, must usually exceed the net rate of interest by an amount which constitutes a payment for the Uncertainty borne.

Normally, therefore, it is to be expected that, as the spread of the curve narrows, its actuarial value $M'P'$ declines and approximates more and more closely to the net rate of interest until, when the venture offers regular and certain returns, Uncertainty is eliminated and $M'P'$ coincides with the net rate of interest MP.

It will be noticed that the idea of Risk as an unrelieved probability of loss is now included as a part of this more general conception, Uncertainty. The term Uncertainty is, however, both clumsy and unfamiliar, and it will be convenient to abandon its use in favour of the term Risk on the understanding that this term will in future be used here with the wider and not the narrower meaning.

Risk, viewed in this way, is a perfectly general conception; it is associated not only with the supply of capital but with the supply of effort of all kinds. It is borne by the labourer who works for a fluctuating wage, by the retailer who carries a stock of merchandise and indeed by every person whose operations require him to carry things of value through time and thus to expose them to influences which he cannot adequately foresee.

As already noticed, it must not be assumed that the bearing of this Risk is invariably an onerous service which commands a price, for the evil which it contains may in many cases be obscured by natural optimism or outweighed by the love of excitement. "The overweening conceit which the greater part of men have of their own abilities," says Adam Smith, "is an ancient evil remarked by the philosophers and moralists of all ages. Their absurd presumption in their own good fortune has been less taken notice of. It is however, if possible, still more universal. . . . The chance of gain is by every man more or less overvalued, and the chance of loss is by most men undervalued, and by scarce any man who is in tolerable health and spirits, valued more than it is worth."[35] Perhaps the most striking example of unpaid Risk-bearing is that of participation in lotteries. The actuarial value of the chances of gain must always be less than the price of the ticket, but the possibilities of large gain affect the mind more powerfully than the chances of small losses, and as a consequence the resources, even of those who understand the chances, flow steadily into a venture which consistently pays a dividend of less than nothing. For similar reasons the amateur speculator does a great deal of Risk-bearing—particularly in connexion with new issues—for which there is every reason to believe he usually receives on the average no payment at all.

This kind of Risk-bearing is, however, associated with the world at play rather than with the world at work. Under the rationalizing influence of business, Risk soon becomes recognized as an evil and Risk-bearing accordingly as a service which is to be undertaken only at a price. Both *a priori* considerations and the evidence summarized in market rates of interest go to show that in general Uncertainty or Risk is a deterrent to the supply of capital, and that the greater the amount of Risk associated with an enterprise, the greater must be the payment, over and above the net rate of interest, to attract Waiting and Working into that enterprise.

Pure Waiting is the service of supplying capital for a net return which is fixed and certain. Risk-bearing is the service which is added when for this fixed and certain payment is substituted a set of prospective net returns. We may, therefore, conclude provisionally that the supply price of capital to any enterprise consists of the net rate of interest plus a market price for Risk-bearing determined by the kind and amount of Risk present. This additional payment is shown diagrammatically by the length P″—P′.

CHAPTER XV

THE INFLUENCE OF THE MARKET ON THE SUPPLY OF CAPITAL

2. RISK ARISING FROM IMMOBILITY OF INVESTED RESOURCES

IN discussing the nature of Risk in the preceding chapter the point of view adopted was that of resources passing into a variety of employments in each of which they were exposed to a special set of risks; that is to say, the Risk considered was that which had its source mainly in the amount of unforeseen change.

The Risk arising from this source is fairly well understood and needs no further consideration at the moment. We may, therefore, assume "the amount of unforeseen change" to be given and pass on to examine more fully the Risk arising from the second source which has been distinguished, *i.e.* the imperfect ability to readjust business arrangements to changing conditions.

It has already been argued that, when a business man in the face of a changing environment proceeds to adjust economic resources to meet economic ends, the amount of Risk which he bears increases with every increase in the degree to which these resources are fixed and specialized, or more exactly, in the extent to which he has lost his power of rapidly readapting these invested resources to meet changing conditions. It may be that he recognizes a keen coming demand for goods which his machinery is not well adapted to produce, or that he experiences a sudden and permanent fall in the demand for his own products; his ability to meet either opportunities or emergencies is weaker the greater the immobility of his resources.

As this enforced immobility of resources increases the risks which he bears, and as Risk-bearing is a service which must in general be paid for, it inevitably follows that he will not commit his capital to fixed forms without the prospect of proportionately increased net returns; that is to say, *ceteris paribus*, the rate of return on his capital must increase with the degree to which its employment requires it to be embodied in forms which are fixed and irrecoverable.

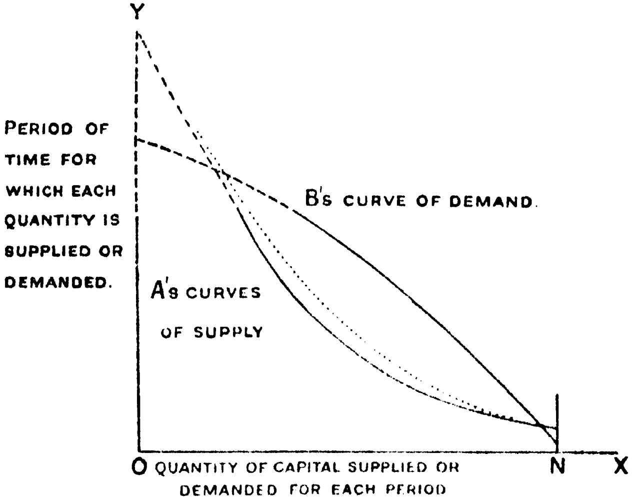
We have now to extend this conception of immobility to include not only the capital which the business man locks up in his own undertaking, but also that capital which he (or any other person) renders in some measure unavailable by supplying it to other parties for considerable periods of time.

In some businesses, such as that of an ironmaster, the greater part of the invested capital is in the form of fixed plant; in others, such as that of the merchant or banker, the greater part may be invested in goods or securities; in all cases, however, the risks of changing circumstances are increased with every increase in the immobility of these resources. If it is true that capital invested in iron-producing plant earns an additional return because of its inability to transform itself in response to changes in demand, it is also true that capital invested by the merchant in goods which are not immediately marketable earns an additional return because it cannot be readily withdrawn to meet emergencies or opportunities arising in connexion with other lines of goods. In a precisely similar way the capital lent to other persons by ironmaster, merchant or banker must earn a higher rate of return in those investments from which it can be withdrawn only with time and difficulty than in those from which it can be recovered on demand. This additional return is a compensation which the investor will require for his impaired ability to meet unforeseen changes in his circumstances, *i.e.* it is the price of bearing the additional insecurity which has been imported into his business situation. We have now to inquire whether the bearing of this additional risk, which it is convenient for the time being to describe as Insecurity, is in fact a service which commands a definite price in the Money Market.

Let A be a person representative of the supply side of the Money Market and let B be a person representative of its demand side. If A contracts to supply capital directly to B the terms of the contract will contain secondary provisions, the most important of which are concerned with the period of the supply and conditions of repayment. The advantages of these provisions may be assigned to one party or the other. In the one extreme case where the period of supply depends on the will of A, these advantages fall wholly to him; this happens, for example, when he lodges money on deposit with a bank on the understanding that he may withdraw it when he chooses. In the other extreme case, where the time of repayment rests with B, these advantages fall entirely to him; such a case would arise if B, as a joint-stock company, were to issue debentures which were repayable at his own convenience.

In the first case A can recover his capital on demand; it is as readily available as if he held it in cash; the supply of this capital introduces no additional insecurity into his business position, and we may reasonably suppose that it is free from any other kind of risk. The rate paid under this type of contract will, therefore, be the price of pure Waiting, the net rate of interest. We may, therefore, take this type of contract as a basis and measure from it the price of bearing the insecurity which falls upon A with any variation in its terms. This is most conveniently expressed by a figure.

Let A's total supply of capital ON be represented by a curve showing the various maximum lengths of time at which for a given rate of interest he will be willing to offer the different parts of his available resources, and let B's curve be a similar analysis of his total demand for ON capital, showing the minimum periods for which he demands the various quantities at that rate of interest.



Finally, let it be supposed that there are no other elements in the supply price of capital except the net rate of interest and the price which compensates for the imperfect availability of capital supplied.

It seems evident that A will be unwilling to supply more than a small proportion of his available resources for any considerable length of time, for otherwise he will greatly weaken his power to meet his business emergencies. It seems evident too that the greater part of B's demand will be for the use of capital for long periods; for he will require it mainly for the durable apparatus of production, railways, buildings, machinery, and so on. Further, A's curve of supply is not likely to show much elasticity, that is, much change of form in response to variations in the rate of interest offered; for his insecurity will increase fast as the period of supply lengthens, and this will prevent him from lending more than a small part of his free resources for any considerable period of time. If the rate of interest is now allowed to vary with the period of supply, A's curve may assume the second position, showing that, even for higher rates, he will lend only a part of his capital for only moderately increased periods of time. This interest will be simply a payment for the additional Insecurity falling on him.

It appears, then, that in the *direct* supply of capital from A to B there would be a series of bargains, *i.e.* of equilibria between demand and supply, corresponding to the different periods of supply; only a comparatively small amount would be marketed at rates of interest which would rise sharply as the period lengthened; the burden of Insecurity would cause the greater part of loanable capital to be supplied only for short periods, and the extensive use of capital in durable production processes would be impossible.

In fact, however, the greater part of capital is supplied, not directly, but through the intermediate organizations of the Money Market, whose operations effect a very great reduction in the Insecurity associated with the supply of capital for long periods. The method by which these organizations reduce this Insecurity lies in the adoption of the principle which underlies insurance. In the typical case, Insecurity springs from some temporary emergency for which immediately available resources are required; it arises in a large measure not from general causes but from the particular business circumstance of the individual capitalist. If therefore the effects of these independent events can be pooled, the temporary shortage of one capitalist can be set off by the temporary plenty of another, the one cancelling the other. In practice the method adopted consists in the provision of a market by which a large number of the parties supplying capital are brought into touch with one another. By this means any capitalist who wishes to recover invested resources is enabled to do so, not by withdrawing it from the party who is applying it to its productive uses, but by shifting the work of supply on to some other capitalist willing to invest.

The banks, in effect, make such a market for their depositors by pooling a large number of individual accounts, an arrangement which enables any depositor to lodge or withdraw resources in accordance with his particular circumstances without imposing on the bank the necessity of recalling these resources from the parties to whom it has lent them. In this way the banks eliminate practically the whole of the Insecurity, which, in conditions of direct supply, would arise from loans yielding a rate of interest such as they pay to those who deposit with them capital repayable on demand.

The economy effected by the Stock Exchange depends on precisely the same principle. In most cases the securities dealt with on this market are representative of capital supplied for very long, even indefinite, periods. Probably only a small fraction of that capital would have been forthcoming were it not that the element of Insecurity in the costs of supply has been reduced by the ease with which the capital may be recovered, not indeed from the party to whom it was originally supplied, but from some other party desirous of investment.

Again, in England, Germany and France the rate at which sound bills are discounted is regularly lower by ½ to 1 per cent than the rate at which loans are made for similar periods against equally good security. This difference is evidently due to the marketability of bills; that is, to the greater availability of resources invested in them; it gives a precise measure of the difference in Insecurity.

These facilities for the recovery of resources apply to so large a part of the total supply of capital that in the gaps where no organization exists for the purpose—such as solicitors' mortgages—long loans can be made with that capital which people prefer to supply for considerable periods of time, so that over the whole range of periods only comparatively small differences of rate accompany the different degrees in which invested resources are available.

These differences of rate, although greatly reduced by the market, are still quite appreciable. When capital is supplied for an indefinite period to a joint-stock company whose shares have only a narrow market, the price of these shares will be depressed, that is to say, their return at current prices will be high, in order to yield a payment which compensates shareholders for their imperfect ability to recover their resources. When capital is invested in Consols which normally have a large and active market this payment is less, but it must still be sufficient to compensate the stock-holder for the charges of jobber and broker which must be incurred if he wishes to recover his capital. When capital is lent on deposit to a bank, this payment falls almost to zero, for the loans can be recovered without cost practically on demand, and the return is substantially equal to the net rate of interest. If, finally, the capital is transferred from deposit to current account, the income of net interest is exchanged for a positive return of convenience and security derived from the services of money, its marginal yield being equal to the interest foregone.

The same considerations which affect the individual capitalist affect also the intermediary dealers in capital. The banks supply the capital at their disposal in a series of loans and investments ranging from those outstanding for several years to those recoverable on demand. The net rate which they charge tends to the same level throughout, but the gross rate varies, among other things, with the period of supply. Given that the security is equally good throughout, the highest rates are obtained on their long loans ; lower rates, as we have already seen, are charged on bills ; lower rates still on capital supplied " at call " ; finally their lodgments with the Bank of England yield them an equivalent of the net rate in convenience and security.

Bankers' loans "at call" involve practically no risk of default on the part of the borrower and none of that special kind of risk which we are for the moment describing as Insecurity. The average return on these loans should then be equal to the net rate of interest, that is to say, to the average rate paid to the public for their deposits, except for a small payment which compensates them for work done in marketing the capital. This point may be examined statistically. The average " call " and " deposit " rates for a large group of London banks during the period 1900–6 were 2·6 per cent and 2·0 per cent respectively, showing a difference of ·6 per cent going to the banks as a payment for the work described. During the same period the average deposit rate of the London Discount houses was 2·4 per cent and their average discount rate for 60-day bills was 3·02, showing a difference of ·6 per cent for work similar to that done by the banks. So close an agreement between these figures is no doubt largely accidental, for there are several minor considerations of which no account has been taken. But the result of the comparison is harmonious with the view that there is a market price for each of the services involved in the supply of capital ; it therefore supports the argument that Insecurity is a cost susceptible of a money measure and that its price may be deducted from actual rates of interest to leave a net rate of interest in the sense defined.

The conclusion of the present chapter is, then, that the investment of resources in forms from which they cannot readily be withdrawn, whether the forms are those of fixed plant or of claims against other persons, weakens the ability of the party supplying those resources to deal with the opportunities and emergencies arising from unforeseen changes in his circumstances. It gives rise, therefore, to that particular kind of risk which we have distinguished as Insecurity. As an element in the costs of production of capital Insecurity is of great importance and would be a strong deterrent to the supply of capital for long periods were it not for the effective work done by the market in reducing its amount.

But, although this cost is greatly reduced, the price corresponding to the residuum still forms an important element in the supply price of capital,—a price which varies with the difficulty of recovering the capital supplied, and amounts even in the case of fairly short loans (as compared with bills) to as much as ½ to 1 per cent per annum. So far, then, we have the supply price of capital as composed of two elements—the market rates for Waiting and for bearing Risk. The price of pure Waiting, *i.e.* the net rate of interest, is the price paid for the service of supplying capital for a period, terminable at will in exchange for a fixed and certain return. It corresponds very nearly with the average rate paid by a bank of high reputation in exchange for lodgments on deposit account repayable on demand or short notice, and would be practically identical with the yield on gilt-edged stocks if there were no charges to be paid to broker and jobber on the purchase and sale of the securities. The price of Risk-bearing consists of two elements: first, the additional rate which must generally be paid when for this fixed and certain return is substituted a set of prospective net returns; second, the further additional rate which must be paid when the party supplying the capital cannot recover it at will to meet the emergencies and opportunities arising from his particular business circumstances.

MAR. 1925

CHAPTER XVI

THE INFLUENCE OF THE MARKET ON THE SUPPLY OF CAPITAL

MARKETING

THERE is in the supply price of capital a third element in addition to those which have already been considered. Just as the supply price of coal contains, over and above the price of getting it out of the ground, a payment for conveying it into the hands of the consumer, so the supply price of capital must include a payment over and above the price of Waiting and Risk-bearing for work done, either by the capitalist himself or by the market on his behalf, in placing that capital at the disposal of those who employ it in its business uses.

It is not very easy to say just what work should be included in the definition of this residual service; as a first approximation the work may be defined as that done in finding the party to whom the capital is to be supplied, carrying that capital to him and recovering it from him at the end of the period of supply.

It would not be worth while discussing the accuracy of this definition were it not that under cover of this discussion we may conveniently deal with one or two minor points which might, if unexplained, give rise to ambiguity. In the first place, we may attempt to justify the definition.

When a quantity of coal has once been supplied to the consumer the costs of the operation are complete and the transaction is closed. When, however, capital is supplied, the costs of Waiting and Risk-bearing run on continuously throughout the period of supply, and this period is bounded at each end by a marketing operation involving work which, it would seem, must necessarily be included as a part of the total costs of supply. It would then be in accordance with common sense to regard the transaction as completed only when the capital is back again in the hands of the capitalist.

But a difficulty in this view arises from the fact that capital may be supplied in two ways. It may be supplied by way of loan, as when a banker lends to his customer or when the public subscribe to an issue of debentures; or it may be supplied by way of purchase, as when the public finances a new company by buying its ordinary or preference shares. The legal distinction between these two cases is an important one. In the former, the capitalist becomes a creditor entitled to recover from his debtor a fixed sum of money. In the latter, he becomes a part proprietor with no power to recover his capital from the company to whom he has supplied it; from a legal point of view the transaction is complete when the shares have been bought, and no further marketing work remains to be done. The former case raises no difficulty. The marketing work done by the banker is completed only when he has got back into his own hands the capital which he has lent. The latter case raises the difficulty that the marketing work is apparently complete when the capitalist has made over his capital to the company whose shares he has bought.

A capitalist who has bought the shares of a company is certainly a part proprietor of the business, and as such incurs certain rights and responsibilities; but, in fact, he has usually little more power than a debenture holder in controlling the manner in which the Directors employ the capital which he has supplied to them. Moreover, although he will have been aware when he bought his shares that he could not recover his capital from the company, he would not usually have supplied that capital unless he knew also that, if he wished to do so, he could recover the value of his shares from some other capitalist by selling them on the market. As therefore he has practically no control over the capital he has supplied and can usually recover the value of his shares at will, he is in effect *lending* his capital to the Board of Directors; and we may reasonably regard his capital as having been supplied, like that of the banker, by way of loan. That being so, the work done by the Stock Exchange in enabling him to sell his shares at will may be regarded as that work of marketing which was missing in his case—the work of getting back into his own hands the amount of capital which he has supplied, increased or diminished by the special risks to which it has been exposed.

From the economic, though not from the legal, point of view, therefore, the arrangement appears to be quite symmetrical. The supply of capital, whether by way of loan or by way of purchase, involves marketing work which may be defined as that of finding the party to whom the capital is to be supplied, carrying the capital to him and recovering it from him at the end of the period of supply. And this definition appears to be an accurate statement of the remaining service which, with Waiting and Risk-bearing, constitutes the total cost of supplying capital.

Nevertheless this definition is not in harmony with the preceding analysis of the costs of supply; it overlaps the definition of risk-bearing. Any complete account of the risks borne by the capitalist in supplying capital must include that special kind of risk which arises when he invests his capital in employments from which it cannot readily be withdrawn, or supplies it to other parties on terms which do not permit him to recover it at will in order to meet any unforeseen change in his business circumstances. But when this risk-bearing is reckoned as a part of the costs of supply it becomes necessary to reckon as a reduction of risk-bearing the work done by various parts of the market organization, in particular by the Stock Exchange, in enabling him to recover at will the capital he has supplied. This same work, however, has been included in the definition of marketing as the work of recovering the capital from the party to whom it has been supplied. The effect of this work in reducing the costs of supply has, therefore, been counted twice: once as a reduction of risk-bearing, and a second time as a reduction of the costs of marketing.

The difficulty then is to decide under which head this particular work is to be assigned. Ought we to class under Risk-bearing or under Marketing the work done by the various parts of the market organization in assisting the capitalist to recover his capital at will? The answer seems to be that in neither case can a completely satisfactory analysis be obtained; but that for convenience of exposition the work should be assigned at one time to the one heading and at another time to the other. In the general analysis of the costs of supply which occupies most of the earlier part of this book, this work is dealt with under Risk-bearing in order to bring out the full effects of the work done by the market in reducing this element of cost. In the latter part of the book, however, where we are concerned with the method of operation of the individual Agencies forming the market, this same work is dealt with as a constructive marketing economy which consists in adding together short lengths of capital, thereby converting "short" into "long" capital and lowering the supply price of capital available for long periods of time. As the main consideration is that of determining the influence of the market in reducing the costs of supply the question whether any particular part of its operations should be reckoned as reducing the costs of Risk-bearing or of Marketing is comparatively unimportant, though it is as well to be aware of the method of accountancy actually adopted.

This difficulty of definition is of little theoretical, and no practical, importance. Its statement serves, however, to bring out the fact that these two services, Risk-bearing and Marketing, are inseparable even in theory and inextricably blended in practice. For example, when a banker is selecting the party to whom he shall lend—when he is marketing his capital—he is at the same time, and by the same effort, selecting the party to whom he can lend safely, that is to say, he is reducing his risks; and no form of words can separate the one from the other.

In these circumstances it is useless to attempt any separate examination of the practical operations involved in marketing. The only plan is to deal with the two kinds of work together under the general head of "work of management," examining the economies effected in its cost by the expert organizations of the market, and trusting that the discussion will throw up to the surface the distinctive characteristics of marketing work proper. A later chapter, therefore, contains a general review of the work done by the various Agencies forming the market, designed to show the characteristic economy effected by each type of organization.

Meanwhile we may define the supply price of capital as composed of three elements. The first is the net rate of interest, the price of pure Waiting, the rate paid for capital recoverable at will supplied in exchange for a fixed and certain return; this rate is practically equivalent to the average yield obtained from investment at current prices in first-class securities with a large and active market. The second is the price of Risk-bearing, the additional rate obtained when (*a*) for this fixed and certain return is substituted a set of prospective returns and (*b*) the capital is not recoverable at will; this rate may be partially isolated by comparing the average yield of securities which differ in the range of their prospective returns or in the facility with which they may be sold. The third element is the price of those residual services involved in carrying capital between the two parties concerned, which are not included under a preceding head.

CHAPTER XVII

THE INFLUENCE OF THE MARKET ON THE DEMAND FOR CAPITAL

THE social importance of the work done by the market cannot be measured simply by its effects in facilitating the supply of capital in response to the actual demand; it must be measured by its effects in facilitating the supply of capital in response to the true social need. The organization of the market operates partly on the side of supply, partly on the side of demand; and its work must be taken to include both that of reducing the costs at which capital is supplied and also that of formulating the social need into an effective market demand. We need therefore to take account of the economies effected by the market on the side of Demand, and may begin by giving some clearer definition of the nature of what has been described as "the true social need."

Any full consideration of the true social demand for new capital, *i.e.* the demand arising not from the wants of individuals but from the true needs of society, would require a discussion of the nature of social welfare and the manner in which this is affected by the distribution of capital among its various uses. It would be necessary to examine the total social effects of the employment of capital in each direction; to consider, for example, how much must be added to the nominal return on capital employed in the construction of new tramways on account of the contribution to the health of the population which would result from their greater ability to live at a distance from industrial centres; and how much must be subtracted from the nominal return on capital devoted to building more breweries, to allow for the additional cost of police and the injury to the *morale* of a part of the consumers of the additional supplies of alcohol. An attempt of this kind to find the net social contribution of capital in each of its various uses and the distribution of the annual supply which would maximize this contribution would be far beyond the scope of this chapter. For the purpose of the present argument we may disregard the *indirect* social effects resulting from the employment of capital and consider the social interest as satisfied by the supply of capital to those uses in which its yield of net interest is highest.

That being so, the sources of the true social demand for capital will lie in the opportunities and emergencies arising from time to time, and involving, it may be, the foundation of a new enterprise, the extension of an old one, a merchanting operation, or the requirements of the State for carrying on war; and this demand will be expressed in each case simply by the set of prospective net returns which it offers to the capitalist. As the argument is concerned primarily with the supply of capital to business uses, the matter may be put more explicitly. Every business opportunity or venture has a social title to capital which is based on its prospective earning power, and should be supplied with capital in accordance with its prospective yield; accordingly the main question to be considered is that of the work done by the market in converting this social title into an effective demand.

The fundamental difficulty in this conversion arises from the extreme complexity of the circumstances which determine the earning power of any venture. In the social interest, capital should be supplied to industrial ventures in accordance with their prospective earning power, but this will occur only if the proper risks of these ventures, *i.e.* the risks as estimated by well-informed opinion (cf. p. 88), correspond to the estimate of those risks which is formed in the mind of the capitalist. In consequence, however, of the complexity of the conditions determining the proper risks of any venture, the capitalist will usually be quite unable to form any accurate estimate of their importance; accordingly, when supplying capital in response to a demand of this kind, he will do so not in accordance with the proper risks of the venture, but in accordance with the estimate of those risks which he forms in the light of his imperfect knowledge. Let us put the matter a little more fully. The social demand for capital arising from any venture depends upon its prospective earning power, but the effective demand arising from that venture depends upon the distorted image of that earning power which is thrown on the mind of the capitalist. The imperfect knowledge of the capitalist acts as a kind of refracting medium which may magnify risks so greatly that no supply is forthcoming, or may contract them so that capital is supplied to ventures with no social title to it; in either case it prevents the flow of capital into industrial undertakings simply in accordance with the social interest, that is to say, in accordance with the set of prospective net returns which they offer.

There is then this gap between the sources of demand and supply; it is due simply to imperfect knowledge and constitutes a kind of "economic distance" which it is the function of the market to bridge. Where capital and business power are in the same hands the gap does not exist; where they are closely allied by business or personal connexions it may be small and capital will flow readily across it, as when a merchant grants trade credit to a retailer or when a business man borrows from his friends; but where a new undertaking comes into the market to obtain capital from the public, the gap is very wide and capital can be forced across it, as an electric current is made to pass a gap between its terminals, only with great noise and waste.

In formulating the social title of business opportunities into an effective demand for capital two devices are important: the first consists in the offer of security, the second in the establishment of some intermediate organization which investigates the claim of the venture and, in effect, presents that claim to the public supported by its own guarantee. We may consider these two devices in order.

The demand for capital presented by any business man includes two kinds of risk, the industrial risks arising from the uncertain efficiency of his undertaking, *i.e.* its ability to supply a product of greater market value than the sum of its expenses, and the personal risks arising from the possibility of some defect in his own business integrity. The distinction is an important one, for it brings out the function of the security in converting prospective earning power into a market demand.

Let us take first the case of a business man who offers as security for a loan only the prospective earning power of his undertaking. The capitalist who meets this demand must expose his capital to both personal and industrial risks, and the price at which he will supply that capital will depend on his necessarily vague estimate of the amount of that twofold risk. A demand of this kind may then be entirely ineffective; in any case it is likely to call forth a supply of capital only at a price which is much higher than that appropriate to the proper risks of the undertaking. One practical consequence of this is that such a business is handicapped in its competition with those which own their own capital.

Let us now contrast this with a similar case in which the business man is able to support his demand with the offer of adequate security. The terms of the loan contract may vary widely, but we may take a typical case to be that of a well-secured advance obtained on mortgage. In these circumstances both personal and industrial risks are automatically shifted from the party supplying the capital to the party employing it. Accordingly the personal risks cease to exist, for the business man cannot profitably defraud himself; and the deterrent effect of the industrial risks is greatly reduced, for they are borne by the party who can most accurately estimate their importance and devise measures to meet them. A demand of this kind, then, is likely to call forth a supply of capital at a price which conforms closely to the industrial risks proper to the undertaking; and an enterprise obtaining its capital in this way is handicapped in its competition with other undertakings employing their own capital by little more than the legal charges involved in the preparation of the security against which the capital is supplied. We may conclude then that the security, by eliminating personal risks and most of those due to imperfect knowledge on the part of the capitalist, plays an important part in enabling the social demand for business capital to become effective in the market.

If the security is important in the formulation of the demand for capital, it follows that the movement of capital into its most productive uses depends to a considerable extent on the forms in which the property of a country is held, its distribution among the population and the law determining the manner in which it may be charged as security. That part of property which is most influential in this way is probably the wealth invested in the negotiable securities dealt in on the Stock Exchanges. It is estimated that in Germany in 1907[26] one-third of the total wealth was invested in this way; in France the proportion is rather larger; in England it may well be larger still. These securities are very widely distributed and readily pledged; their influence on the mobility of capital must be of the first importance.

Immobilia such as land and buildings are extensively used in support of demands for capital in France; for example, they are employed as security for loans amounting to £560 m. But the internal demands arising in this way in England are not in general formulated by any special market organization as is the case on the Continent. Such banks as the Crédit Foncier,[27] for example, obtain capital by the issue of their own bonds and lend it against mortgages and similar securities; in other words, they collect that part of the public demand which is backed by a miscellaneous and unmarketable aggregate of charges and convert it into an effective demand in the public market expressed in terms of a homogeneous issue of marketable bonds. The operations of such a bank may evidently introduce an important economy; for the work done by hundreds of solicitors is unified in a single institution; and the capitalist, inasmuch as he holds a marketable bond, can recover the value of his investment at will without disturbing the party to whom his capital has been supplied.

In addition to such material forms is the security afforded by the business reputation and wealth which constitute the *credit* of the borrower. But the trustworthiness of business men is ineffective as a power to borrow until it is recognized by those with capital to lend. The banks are in intimate contact with practically every business man in the country; and the information which they acquire, supplemented by the work of inquiry agents such as Perry's or Stubbs' and by the personal contact of business men in the great financial centres, is diffused throughout the entire business community. Perhaps the most important part of the work done by the Money Market in promoting the mobility of capital lies in this diffusion of information by which business reputation is made effective as a power to borrow. The support of brokers, financiers and underwriters to the flotation of a new issue is generally dependent less on the actual prospects of the undertaking, as to which they can know little, than on the reputation of its sponsors.[28] Bankers are greatly influenced, even when making well-secured loans, by their opinion of the borrower, for they are naturally reluctant to recover an advance by realizing the collateral deposited by their customer; some German bankers even maintain that the unsecured is safer than the secured loan. The bill of exchange, one of the most powerful instruments for promoting the mobility of capital, depends for its successful operation upon the diffusion of information through banks and inquiry agents of the solvency of the parties who have put their names on it.

As is well known, the use of the personal guarantee in the Scotch "cash credit" system converts the potential demand of capable business men into an effective means of obtaining capital from the banks.[29] In England, too, this method is extensively used; the directors of a joint-stock company, for instance, may give their guarantee in support of a loan from the company's bankers, thereby avoiding the issue of debentures and the consequent publication of the fact that the company is borrowing. The collective personal guarantee, organized by special banks, is the means by which many hundreds of thousands of peasants and small producers on the Continent obtain from the public the capital they require to carry out their agricultural and industrial operations. Business reputation is sometimes the sole means by which the small retailer obtains so much as one half of his capital from a wholesale dealer; and it is the principal means by which the English banks borrow some £840 m. from the public.

There is no need to enter into a lengthy examination of the various forms of material and immaterial wealth which business men may use in support of their demands for capital. This brief discussion of the three principal forms is sufficient to show their great importance in reducing "economic distance" and facilitating the movement of capital into its various uses. It shows too—what is indeed obvious enough—that the mobility, and, therefore, the productivity, of the capital of a country depend largely on the wide distribution of forms of material wealth and on the reputation of its business men. Our vast war loans, by reason of their wide distribution among the population in the form of readily pledged securities, are likely at least to make some contribution to this end.

The influence of the law in creating and perfecting the various forms of security is far too large a subject to be discussed here in any detail; it must suffice to give one or two instances which illustrate its effects. Perhaps the most striking example of the effects of legal enactment in promoting the mobility of capital follows from the provisions of the long series of Companies Acts which have gradually developed the present very convenient procedure for the formation of the public Joint-Stock Company. The legal procedure laid down in these Acts enables, *inter alia*, a business opportunity —a merely potential source of earnings—to be embodied in the form of negotiable titles to property and presented on the market as an effective demand for capital. The essential parts of the operation by which this potential demand is formulated are these. In the first place, some source of earning power, which may be an invention, a concession or other venture, is investigated by a promoting group who capitalize it at their discretion and sell it to a company formed to acquire and develop it. The capital of the company so determined is then embodied in the form of shares, each one of which entitles the holder to a defined portion of the property and earnings of the company, while involving him in no liability beyond its face value for any liabilities which the company may incur. Finally, these shares are sold to the public by means of the machinery of the market. This very convenient procedure enabling a public company to obtain the capital it needs is supplemented by another provision which gives it a further advantage over the private business man; for while in general a large part of the property of the private trader cannot be charged in any satisfactory way as security for a loan, the law enables the joint-stock company to employ the whole of its assets, even its book debts, as a basis of borrowing power, charging them by means of debentures, which may be deposited with a bank as security for an advance or sold to the public in the open market. It is evident, therefore, that the legal machinery created by the Companies Acts is a very powerful means by which any latent source of earning power may attract to itself the capital requisite for its development; practical evidence is given by the fact that each year several hundreds of new public companies are formed to acquire existing undertakings or develop new business opportunities at home or abroad.

The Acts relating to Companies show the power of the law to create a security; those regulating the Crédit Foncier and many other mortgage banks give an instance of the manner in which the law may perfect a security and so make it more effective as a means of attracting capital. The work of the Crédit Foncier, for example, in supplying capital to landowners against mortgage of their property is greatly facilitated by an important legal privilege known as the "purge."[30] The bank, having assured itself that there are no registered claims on the property against which it proposes to lend, issues a brief official notice calling on third parties to make known any rights which they may possess in respect of the property in question. If no hidden claims are disclosed within a period of about three weeks, the bank may safely proceed to lend against a mortgage of the property, for its special legal privilege makes its title to the property incontestable by any claims which may subsequently be brought forward. A legal provision of this kind evidently reduces in a marked degree the labour and risks of the bank's work and so lowers the supply price at which capital may be provided against this form of security. Some measure of the economy is given by the heavy legal charges which must be incurred in England in investigating the title of the property to be charged with a mortgage as security for a loan. The great practical importance of State action in creating and perfecting forms of security is very evident at the end of 1920, when the League of Nations is advocating the adoption of two plans of this kind, each designed to promote the flow of capital into countries whose demand for it is urgent but largely ineffective.

The first important method by which the social title to capital is formulated lies then in the device of the security. The employment of a security in support of a demand for a loan destroys the personal risks and shifts the business risks, in part at least, on to the borrower, whose interest it then becomes to reduce them to a minimum. It bridges the economic distance separating borrower and lender, for it partly destroys the effects of ignorance on the part of the lender in distorting his estimate of the risks of the loan, and so enables capital to flow more readily to the points of highest yield. The mobility of capital in any country largely depends, therefore, on the forms in which property is held, especially on the holding of Stock Exchange securities and, if we choose to reckon this as a kind of security, on the reputation of its business men; it depends also on the wide distribution of these forms of property among the people. The various forms of security may be developed by the market, in particular by such organizations as land mortgage institutions and the multitude of people's banks formed on the Continent. Their efficiency in supporting a demand for capital is naturally affected by the whole body of property law; and they may be created and perfected by such special legal enactments as the Acts relating to the formation of companies and the negotiation and rights of recourse in respect of bills of exchange.

We turn now to the second method by which the demand for capital is formulated.

That part of the demand for capital which arises from the need to float new undertakings by means of capital obtained from the public market cannot usually be supported by the offer of security. Such a demand must rest almost entirely on prospective earning power, and can be effective only in so far as it can convince the public of the worth of these prospects. It is evident, however, that the difficulty of making out a good case is very great; for an estimate of the earning power of a new venture and the integrity of its management is a matter which requires intimate and expert knowledge; and as the public can have little or no independent information on either point, supply will be regulated not by the proper risks of the venture but by the distorted image of those risks resulting from the imperfect knowledge of the capitalist. This imperfect knowledge will in some cases magnify risks and cause capital to be withheld from useful enterprises, and in other cases diminish the estimation of risk and so cause capital to flow into the hands of fraudulent company promoters and into ventures with no reasonable prospect of success. Accordingly in the flotation of new enterprises on the market, and even in the conversion or expansion of existing undertakings, there is a good *prima facie* case for the interposition of some expert, responsible body which could examine impartially the prospects of the venture and, if suitable, present it to the public with the implicit guarantee that the enterprise was one with a reasonable claim to the capital for which it asked. Such a body, lending its reputation in support of a demand for capital, would perform a social function similar to that of an Accepting House.

In Germany, as is well known, this function is performed to a considerable extent by the great credit banks. For example, groups of these banks stand behind the mining and electric industries; they have an intimate knowledge of the earning power of the undertakings in which they are interested, and they sell the shares and bonds of these undertakings to the public with their assurance that the securities carry with them a reasonable prospect of dividends. In France, too, industrial securities are marketed largely by bankers who, in effect, pledge their reputation on the soundness of the securities which they offer to their customers. Such operations can be effectively carried out only with very special knowledge and experience and, even then, they may react unfavourably on the other branches of the banks' work. But the results achieved seem to show that such organizations can do very valuable work in bridging the gap between capital and the opportunities for its profitable employment.

In England the position is very different. An industrial enterprise which requires to obtain its capital from the public must usually present its case without the aid of any well-known intermediary. This may be fairly satisfactory when the public have some means of estimating the genuineness of its demands; for example, a textile factory of good reputation may easily obtain increased supplies of capital locally by the issue of debentures, and a well-known undertaking whose earning power is proved may come to the London market and without much difficulty sell itself to the public as a joint-stock company; but it is quite another matter when an industrial venture of which the public know little or nothing comes to the London market for the supply of capital it needs in order to start business.

The demand of such a venture is probably formulated by a little *ad hoc* promoting group who state their case in the form of a prospectus with all the ingenuity and optimism which the law allows, distribute these prospectuses far and wide and generally insure their prospects of obtaining a minimum supply of capital by underwriting their issues at a heavy cost. This demand is based on a set of industrial circumstances so complex that without expert investigation any opinion is worthless; and it is put forward by interested parties practically unsupported by any independent recommendation. Whether or no the venture has any social title to be supplied with capital, it seems clear that a demand so formulated could not carry conviction of this title to any reasonable person. With such market machinery, therefore, the prospective earning power of any venture is only very imperfectly converted into an effective demand. Good and bad ventures are almost indistinguishable and capital is supplied to both wastefully and at haphazard.

We have, then, the following conclusions with regard to the demand for new business capital. In the social interest capital should flow into business ventures in accordance with their prospective earning power; accordingly, the social demand for capital is expressed simply by the prospective earning power of industrial ventures of all kinds. In this simple form it must be in a great measure ineffective; for the proper risks of the venture are increased in the view of the capitalist by his imperfect knowledge of the economic efficiency of the venture and by the possibility of fraud on the part of the borrower. The "economic distance" caused by these additional risks is small when lender and borrower are in close touch, but widens as the two parties have less knowledge of one another and is at its maximum when a new undertaking is endeavouring to obtain its capital in the public market. On the side of demand the gap is bridged to a very great extent by security and business reputation; but this device cannot usually be employed in the flotation of undertakings on the public market; hence the case for some intermediate marketing organization which would be responsible for these issues. In other countries the work done by the market in formulating demand is in many respects more complete than in England. But no very definite conclusions can be drawn from this fact, as the organization of the money market appropriate to any country necessarily depends on its general social conditions. It seems probable that in England the most important consideration affecting the form of this part of the market organization has been the wealth of its population, which has enabled business men to obtain their supplies of capital in a great measure from other parties associated with them by business or personal relations.

CHAPTER XVIII

REVIEW OF MARKETING OPERATIONS

SO far the argument has been concerned with the influences which check the flow of capital towards the points of highest net return; it has accordingly dealt on the one hand with the cost of production of capital and on the other with the difficulties involved in the effective formulation of Demand; but it has treated only in an incidental way the effect of the work done by the individual market agencies in reducing these costs. It needs, therefore, to be supplemented by a review of the work done by each of these agencies, designed to bring out the nature of the economy effected by each. It should be noticed that in this preliminary review the Banks, the Market for Negotiable Securities and Trade Credit are not dealt with on a scale at all proportionate to their importance, for they receive separate treatment in later chapters. It may be noticed, too, that no attempt will be made to confine the meaning of the term " marketing " within the narrow limits previously defined; its meaning must be derived from its context; but usually it will be used in the ordinary business sense, that is to say, it will refer to the whole work of management of capital, and will consequently include all the work done in reducing risks and establishing business contact between the parties who supply capital and those who employ it.

In order that the situation with which we are concerned may be quite clear it may be well to recall the general conditions which form the setting of the work to be reviewed. On the one hand is the group of capitalists, which includes all those who have available supplies of free capital; on the other hand is the group of business men and others, including all those who employ capital; between the two lies the Money Market, facilitating the movement from one group to the other of the stream of free capital seeking investment, or rather of that part of it which is not applied directly by its owners in maintaining and extending their businesses. The market facilitates the transfer of this stream of free capital, partly by lowering the costs of supply, partly by assisting in the formulation of the demand. We have to distinguish the nature of the economy effected by each of the agencies forming the market.

The Banking System

The most prominent part of the market organization dealing with the supply of capital for *short* periods is undoubtedly the banks, including in that term, not the Foreign and Colonial institutions whose work lies mainly abroad, or firms such as Higginson or Morgan who are concerned mainly with the issue of securities, but the typically English banking system headed by the Bank of England and generally, though not very accurately, described as the Joint-Stock Banks.

These banks, though economically intermediaries or middlemen, are legally principals ; they do not merely assist the capitalist, but take from him, and assume themselves, the entire work of management of his disposable capital. They have set up, in England and Wales, an elaborate and highly centralized organization of some 5000 branches by means of which they establish direct business contact with very large numbers of people who have, and people who need, capital. This system of branches enables them, by the offer of a rate of interest or of cheque-making facilities, to collect from the public many thousands of small items of capital amounting in the aggregate (in 1914) to some £840 m. The centralized character of this system enables them to pool these items very effectively and to make a large part of the aggregate available for loans to the business men with whom their branch system places them in immediate contact. Add to the economies due to this organization those arising from the facts that they are expert dealers in capital and also principals whose profits depend on the reduction of risk and expenses of marketing, and it becomes evident that their operations have a very powerful effect in lowering the supply price of capital for temporary business uses.

The Devonshire farmer is hardly likely to undertake himself the work of lending in Lancashire a small quantity of capital which he can temporarily spare ; and if he did so he would naturally require a very high return to compensate him for the trouble of finding a borrower, for the heavy risks due to his imperfect knowledge and for the insecurity which he would suffer from his inability to recover his capital on demand in order to meet any business emergency to which he might be exposed. With the interposition of the banks, however, the capitalist with a little capital temporarily free, is enabled to obtain interest upon it at a rate of perhaps 2½ per cent per annum practically without trouble, risk or insecurity ; while the capital which he supplies, pooled in a larger aggregate, is transferred cheaply and rapidly from one point to another in accordance with the seasonal demands of trade and industry, and is supplied to one remote borrower after another at rates exceeding that paid to the capitalist by, perhaps, only 1½ per cent or 2 per cent.

TRADE CREDIT

In the outer market Trade Credit is the means by which a very large aggregate amount of capital is supplied for short periods for business uses. This part of the market organization is in a great measure bound up with the ordinary work of the merchant or dealer. It gives rise to no peculiar economies such as those produced by the banks, but it lowers the supply price of capital to many business men who would, in its absence, find it difficult, if not impossible, to obtain supplies elsewhere. There can be little doubt, for example, that the supply of small tradesmen coming into being is in a great measure dependent on the merchant who provides them, on credit, with a large proportion of the necessary stock, and that many small farmers are enabled to tide over bad times with the assistance of the dealer who makes them cash advances on their growing crops or supplies them with seeds, fertilizers and so on for payment at a later date.

These merchants and dealers must in general supply capital without security of the kind which would be required by banks and most other lenders. Their special business knowledge of the character and means of the parties to whom they grant trade credit reduces their risks and gives them special facilities for financing this class of borrower; but it is only to be expected that the terms on which they lend should be somewhat onerous. These terms may be expressed simply as a rate of interest on money lent, or in the form of a scale of prices for goods supplied, which increases as the date of payment for the goods is more remote; but they frequently carry with them implicit restrictions which may considerably increase their burden. For example, the competition of merchants for the custom of retailers sometimes expresses itself in the form of an extension of trade credit, of an offer of more easy terms of payment for goods supplied, an offer which enables the merchant to establish his trade connexions more firmly, but imposes on the retailer a limitation of the sources from which he can buy his goods and may place him substantially in the position of a "tied house." Again, the dealer who in one way or another finances the small farmer will often do so on the understanding that the farmer's crops shall be sold only to him. In such cases the farmer is supplied with capital secretly, a dubious but apparently highly prized advantage, and the loan may be made at a low nominal rate; but the true rate may be, and often is, high, for it depends on the price at which the farmer sells his produce, a price which rests largely with the dealer who has supplied him with capital.

The main characteristics of trade credit as a means of supplying capital appear then to be these: by its means a class of borrowers who often can offer little or no security except their character and business record are enabled to obtain supplies of capital for short periods from lenders who have special knowledge of their trustworthiness and business circumstances; it is the means, therefore, by which many retailers are enabled to set up and maintain independent businesses and by which business men in general are often enabled to tide over temporary emergencies Being employed, however, in the competition for custom, trade credit may be unduly extended and result in capital being lent recklessly and irrecoverably, clear instances of this being seen in German pre-war trade with Japan, South America and other countries. At the same time the supply of capital by this means is often accompanied by restrictions which limit the freedom of the borrower to buy and sell where he chooses, thereby placing him in a less or greater degree at the mercy of his creditor and making the terms of the loan dependent largely on the will of the lender. Trade Credit, therefore, as an agency for the supply of capital has considerable social importance; but, perhaps, its main interest and certainly its greatest difficulty lies in its effect on prices, in the influence of changes in the purchasing power granted by way of trade credit in causing fluctuations in the general level of prices. These influences are discussed in a later chapter.

THE MARKET FORMED BY SOLICITORS

The outer market includes also another important organization for the transfer of capital—the series of local markets in which solicitors convey capital to business men and other parties who are able to offer as security such property as land and buildings which may be subjected to a mortgage or similar charge.

The total amount of capital lent against the mortgage of land and buildings in France is known to have been about £560 m. in 1908, while in Germany at about the same date the amount lent to landowners on mortgage and other real estate security is estimated roughly at £2000 m.[31] These figures suggest that this part of the market for capital is likely to be of considerable importance in England; indeed, there can be no doubt that large amounts of capital are supplied through this organization, but it seems to be quite impossible to form any definite estimate of its amount. Mr. A. L. Cox in a paper read to the Surveyors' Institute writes: "... the properties that have never been mortgaged are few and far between. . . . It is impossible to indicate with accuracy the total amount loaned on mortgage of real estate in the United Kingdom, but published accounts show that insurance companies and building societies have more than £150 m. on loan." Again, Mr. J. J. Done in a paper read before the same Institute states: "An enormous amount of money is advanced every year on suburban house property. . . . I strongly suspect that the majority, perhaps the large majority, of suburban houses have a mortgage on them." [32] While in the opinion of "a solicitor of great ability and experience" probably more than three-quarters of the land and buildings in the country are subject to some form of mortgage. When it is remembered that the aggregate pre-war value of the land and buildings of the United Kingdom was in the neighbourhood of £4500 m. some rough idea may be formed of the volume of capital supplied through the agency of solicitors.

The capital supplied in this way is evidently lent in the main for long periods, though it must not be overlooked that bankers lend considerable sums temporarily against mortgage securities. It appears to be supplied principally for business purposes and, as most undertakings possess property which may be subjected to a mortgage, must be an important source of supply of business capital.

But there are evidently particular classes of borrowers to whom this method of supply will be of especial importance; for example, "The corporations of many of the larger towns, especially in the manufacturing districts, borrow extensively upon short period mortgages. Tradesmen and others who are getting on well in business call at the office of the town clerk or borough treasurer when they have a little money to invest, and generally find no difficulty in placing it on loan with the corporation." [33]

More interesting among these particular classes, however, are landowners and business men who produce very durable goods. The use of the mortgage in drawing capital into agriculture for the construction of permanent improvements is too well recognized to need discussion. Its use is not less important in building operations; it is stated, by experienced solicitors, for example, that considerably more than one-half of the new buildings coming into being are financed partly or wholly by loans on mortgage.

This method of supplying capital against mortgage can hardly be less important in the shipbuilding industry. In the Wear district "in normal times the ships are mortgaged to the Shipbuilder and the mortgage paid off, either by earnings only, or in some cases by instalments in addition to earnings. . . . Builders frequently built and delivered ships costing £25,000 to £40,000 on a deposit of £4000 to £6000." Again, on the Clyde and Tyne, "the financial arrangements between the Shipbuilder and his customer in practice vary strictly in accordance with the demand for ships. In very slack times Shipbuilders have almost made themselves Moneylenders, agreeing to accept 50 per cent and sometimes as little as 10 per cent, spread over the period of the building, allowing the remainder to lie over for payment during perhaps from three to six years. In these circumstances, the ships are mortgaged to the Shipbuilder and the mortgages are paid off from later earnings. . . . On the contrary, however, when trade is good and there is a great demand for ships, the Shipbuilder is able to stiffen his back and have his payments made in the form of instalments during building." [34]

These examples are causing the argument to drift away somewhat from the local market for capital formed by solicitors into the region of Trade Credit ; if they were extended to illustrate the work done by solicitors in assisting joint-stock companies of all kinds to borrow on the security of debentures, they would lead away still further into the work of the securities market ; for there is no clear line of division between these various markets ; the operations of each shade off imperceptibly into those of the others.

The economic function carried out by the solicitor who forms a local market for capital is a simple one. He may relieve the investor of marketing work by placing him in contact with a suitable borrower, in which case he receives an additional fee ; otherwise his function is to reduce risks by investigating the security and casting the loan contract into its appropriate legal form.

In France and Germany this part of the market is more highly organized by the establishment of Mortgage banks, whose operations yield an additional economy over and above those arising from the work of the English solicitor ; for while the mortgagor in England can recover his capital only at end of a fixed period of supply, *i.e.* when the mortgage "falls in," or by the troublesome process of transferring his mortgage to some other party, the mortgagor abroad can sell his security on an organized market at any moment when his particular business circumstances make this desirable. The manner in which the Mortgage banks reduce the Insecurity of the investor in this way is somewhat as follows : they lend large amounts of capital, usually for very long periods, on such securities as mortgages and municipal bonds, and obtain this capital from the public by the issue of a homogeneous mass of their own bonds secured on the mortgages and bonds against which they lend ; accordingly the member of the public who supplies capital against mortgage security through the agency of these banks obtains, not as in England a security merely entitling him to repayment at a fixed date, but a security which he can realize at any moment he chooses by sale in a public market. The operations of these banks in reducing the Insecurity attaching to the supply of capital for very long periods effects therefore an important economy. As an illustration of the wide scope of their operations it may be noticed that in 1907 forty-one Mortgage banks in Germany had outstanding loans on mortgage to an amount exceeding £460 m. The operations of these German banks are of course far from covering the whole field; large amounts of capital are supplied by Savings banks against mortgages, while it is estimated that 80 per cent of the premium reserves of Insurance companies are similarly invested, in addition to some £1000 m. supplied by private mortgagors.[35] Possibly one reason for the absence of these banks in England is the ample supply of capital and the fact that much of the capital conveyed by solicitors in this country against mortgage security consists of the funds of such parties as trustees who prefer to invest it for long periods and consequently attach little value to the opportunity to recover it at will.

TRUST AND FINANCE COMPANIES

Among the specialized institutions forming the Money Market proper are the Financial Trusts and the Financial, Land and Investment Companies, a group of several hundreds of companies controlling capital of a nominal value of some £350 m. supplied by the public partly against shares partly against issues of debentures.

There are certain general differences between these two groups of agencies: Dr. Weber points out, for example, that the shares of the Financial, Land and Investment companies are more speculative in character, while Mr. E. T. Powell notes that these companies lend for shorter periods than the Trusts. But there seems to be no clear line of demarcation between their functions, so that it is convenient to deal with them as a single group. The individual companies forming this group differ considerably in their general character, ranging from the highly reputable Trust company proper, mainly concerned in carrying on a conservative investment business, to financial houses engaged in speculative operations of a most varied kind; their field of work lies to some extent in the United Kingdom, but mainly, it would seem, in foreign countries.

The purposes for which they are formed are very numerous. Among the objects of companies operating mainly at home are these: to invest funds; to discount bills; to lend on approved securities, on mortgage of land and on house and shop property, etc.; to deal in land and houses; to acquire and develop property; to develop and assist commercial undertakings; to underwrite issues of securities and to convert businesses into joint-stock companies ; to receive deposits ; to purchase assets of insolvent estates ; and to carry on business as trustees and agents. The companies operating mainly abroad are even more varied in their objects. They are formed to invest in United States securities, in Canadian real estate mortgages, in railway bonds, in telegraph companies, and in rubber, tea and coffee plantations ; to lend against mining securities and on land, stations, live stock and wool in Australia ; to carry on a banking business ; to deal in oil companies, in options and mining claims in Alaska ; to assist industrial development in Mexico ; to promote and invest in rubber companies, to employ capital in South Africa in the issue and promotion of financial and other undertakings, to act as an Issue House for Government, Municipal and other loans ; to acquire freehold land, to acquire and work railways ; to provide an organization whereby existing stocks may be converted into more than one class of security ; to finance a prospecting and exploration company, to carry on general financial business, to act as agents, trustees, etc.

The great variety of the purposes for which these companies are formed tends rather to obscure the true nature of their work. But it will be noticed that nearly all their operations centre round one principal function—that of supplying capital. Essentially they are expert investment agencies, on the one hand collecting capital from the public and on the other supplying it in many different ways and to many different employments at home and abroad. They may supply it by way of loan or investment, by the promotion of new ventures or by undertaking themselves the administration of some business enterprise ; in every case they take over from the investor practically the whole work of management of his capital and increase its yield by their expert knowledge of the field of investment.

This substitution of expert investment agencies for the ill-informed operations of the investor naturally facilitates the movement of capital towards the points of highest yield, and so increases its productivity. It has the effect, in the first place, of widening immensely the field of employment of capital, for it would clearly be out of the question for the average investor to attempt to lend against mortgages of real estate in the United States or to wool-producers in Australia. Again, as each company controls the capital of many individual investors it is enabled to spread its risks by selecting a wide range of investments ; a Trust company may, for example, hold as many as two to five hundred different kinds of securities whose fluctuating dividends set off one another and enable the company to pay its own shareholders a good and steady return. A further advantage is the ability of these companies by underwriting new issues to obtain sound securities at a price lower, and often much lower, than they are offered to the public. Their special knowledge enables them also to add to their profits by speculative dealings in stocks and shares and other forms of property; in its more conservative aspects this work takes the form of buying securities whose values are temporarily depressed or of selling those whose values are temporarily inflated, "undoing" the deal at a profit when these values have again recovered their normal level. Sir Robert Giffen has pointed out the great social advantage of operations of this kind; for the continuous shifting of large amounts of capital from one security to another under expert speculative control is an element of great strength in a market, protecting it, in part at least, from violent upward and downward movements in the prices of securities which are unjustified by changes in their prospective yield.

In addition to the important economies effected by Trust and Investment companies in this way is the influence of their work in financing and administering new undertakings and of their other miscellaneous services.

Some of these companies undertake the flotation of new undertakings operating in England and the marketing of securities on behalf of such parties as foreign States who wish to obtain supplies of capital from the English public; but this kind of work cannot be regarded as typical of the group as a whole. The comment applies with less force to their foreign work; for many British undertakings operating abroad in the production of rubber, the development of gold mines and in less speculative enterprises have been formed by these companies, who supply them with capital either directly from their own resources or indirectly by undertaking the sale of their shares and debentures on the London market.

Many of these companies themselves administer the capital at their disposal and undertake pioneer and development work in all parts of the world. They may be formed to encourage irrigation in Mexico, to assist in financing and developing peat coal deposits or to acquire and work a railway; one company owns land in Argentina, another owns a large number of farms in South Africa, another a concession in Egypt. Side by side with this work of development are the salvage operations undertaken by companies formed to take over the assets of insolvent estates or of undertakings which find themselves in difficulties. This salvage work, according to Mr. E. T. Powell, is "very important and characteristic."

Regarded broadly, the nature of the work done by these companies seems to be midway between that of the banks and that of the market for new negotiable securities. They resemble the banks in their operations, inasmuch as they take over from the public the work of management of the capital entrusted to them, administer it as principals and depend for their profits on their success in carrying it to the points of highest return. But their work is more nearly akin to that of the securities market in that it is concerned with the supply of capital for long periods of time, and in so far as it consists in the issue of new stocks and shares must be reckoned as forming a part of that market. As a broad generalization it may perhaps be said that their typical service lies in supplying capital for the more speculative kinds of industrial enterprise mainly in foreign countries. Mr. Goschen bore witness to the effectiveness of their work in carrying capital abroad when he maintained in his "Seven per cent" that their operations were one of the principal causes of the exceptionally high rate of interest prevailing in 1864.

THE MARKET FOR STOCK EXCHANGE SECURITIES

The Market for Negotiable Securities forms the principal organization dealing with the supply of capital for long periods; it provides facilities, it is true, for obtaining from the public comparatively short loans against such securities as Treasury bills and short dated American railway bonds, but its main work lies in facilitating the provision of capital for long and even indefinite periods of time. Its operations are largely international in character, and have been the principal means by which this country had invested, by 1911, some £3000 m. in State and Municipal loans, railways and other undertakings in countries abroad. That figure indicates only partially the vast scope of its work; so long ago as 1900 the countries of Europe owned £13,000 m. in negotiable securities, and were buying new securities through the agency of their various markets at an annual rate of more than £400 m.[37]

The English securities market resembles the banking system in the fundamental nature of its operations; each has for its function the work of facilitating the movement of capital into its most profitable uses; and this similarity extends further than is apparent at first sight, for, as will presently be seen, the economies to which each organization gives rise are identical in their essential character. There is, however, a wide difference between the two in the extent to which they relieve the investor of the work of management of his capital. The banks are principals; they own the capital which they obtain from the public, and consequently assume the entire responsibility for the risks and labour of its investment. The securities market, on the other hand, acts in an advisory rather than an executive capacity. From this there arise important differences in the social effects produced by the two kinds of organization. The profits of the banks depend directly upon the wise administration of the resources entrusted to them by the public; their interest and the interest of society alike depend upon their carrying the capital at their disposal to the points of highest yield. But the profits of the Issue House and the company promoter are not in general directly dependent upon the most effective distribution of the capital supplied by the public; they are so dependent only so far as their reputation is bound up with the wise investment of capital and suffers if they facilitate the movement of capital into uses which do not yield a reasonable return. There is not, therefore, an identity of private and social interest in the work of the securities market; the natural social safeguard does not exist here as it does in the work of the banks; hence much capital supplied by the public through the agency of the market for negotiable securities passes into employments which offer no reasonable prospect of adequate return and is partially or wholly lost.

The securities market consists of two parts, each distinct in function but jointly contributing to the common end of facilitating the transfer of capital into the various uses open to it. In England the market for *new* securities is made up of the vague, ill-organized group containing the Issue Houses, the company promoters and brokers, the underwriters and the advertisement houses; while the market for *old* securities consists of the highly organized London and Provincial Stock Exchanges, in which the active principle is found in the jobbers and brokers. The function of the first part of the market is to formulate the demand for capital, to present this to the public by the offer of securities and to facilitate the flow of capital from the public in response. In carrying out this function it has to bear the risks arising from the fact that the public may fail to supply the capital required, and it has to undertake much marketing work in bringing the demand prominently to the public notice. Hence it relieves the two groups which it brings into business contact of work of management which may often involve heavy risks and much labour, and so must often be paid a heavy price for its services. The function of the second part of the market, the Stock Exchanges, is secondary to the main work of obtaining supplies of new capital from the public. It contributes to that end by providing facilities by which securities, after they have been purchased, may be quickly and cheaply exchanged among the parties who hold them; for these facilities give the investor who subscribes to a new issue an assurance that he will be able, whenever he chooses, to recover his capital, or at any rate the market value of his security, not indeed from the party to whom it has been supplied, but from some other party with resources seeking investment. The first part of the market therefore lowers the (real) costs of conveying into the hands of States, railway companies and so on, a continuous stream of capital which forms a vast stock outstanding in the hands of these various parties; while the second part of the market lowers the (real) costs of Waiting and Risk-bearing associated with this outstanding stock by providing facilities for the continuous shifting of these costs from one investor to another in accordance with their individual circumstances, thereby enabling this Waiting and Risk-bearing to be undertaken from day to day by those who are most able and willing to do so. These economies are evidently fundamentally similar to those effected by the banks where the two parts are joined together in one organization; for the banks supply and maintain outstanding in the hands of business men a stock of capital obtained from their depositors, each one of whom can recover his capital at will in accordance with his particular business exigencies.

But although the nature of the economies effected by these two types of organization is identical, there is, as already noticed, a fundamental difference of method which has important social consequences. The market for new securities takes over from the investor only a part of the work of management; it leaves to him the selection of his investment and consequently the greater part of the risks of supply. The Issue houses and company promoters offer him securities; the investment broker will advise him in choosing between them; the financial press provides him with a vast amount of information on which he may form a judgment of their value; but this assistance falls far short of that given by the banks, who assume the entire responsibility for lending out the capital deposited with them. When account is taken of the inevitable lack of first-hand knowledge on the part of the public of the great variety of securities offered to them, of their credulity and their frequently speculative tendencies, it naturally follows that, as already noticed, they annually supply large amounts of capital which is absorbed by intermediaries or dissipated in profitless undertakings.

This preliminary review of the work of the market in the transport of capital from those who supply it to those who employ it, shows that, in spite of defects in parts of the organization, it has a very powerful effect on the costs of supply. By taking over from the capitalist, partly or wholly, the work of management of his capital, and by employing expert knowledge and an elaborate organization in facilitating its movement to the points of highest yield, it reduces greatly the amount of risk and of marketing work involved in supply; moreover, as the costs of Waiting are inseparably bound up with those of risk-bearing and marketing, their reduction directly by the market has an important indirect influence in increasing the supply of Waiting, so reducing still further the supply price of capital. The work done by the market in developing the effective demand for capital necessarily tends, in its immediate effects, to raise the price at which the use of capital is sold; but in the long run this tendency is set off, in part or whole, by its influence in increasing the productivity of social resources, the source from which the annual supply of new saving is derived.

PART IV.—INDIVIDUAL MARKETING ORGANIZATIONS

CHAPTER XIX

THE BANKING SYSTEM

PRELIMINARY

BANKING forms the centre of the credit system in all developed countries. In England it occupies a position of the greatest social importance, not only as the first among the agencies supplying capital to business men, but also as the principal source of the supply of currency and consequently the centre from which that supply is controlled. The scope of the work undertaken by the banking system shows considerable differences as between one country and another, differences which are natural enough in view of the fact that the form which the system assumes is dependent in a peculiar degree upon the character of the social organization within which it operates.

To trace with certainty the causes determining the particular form assumed by the English system would involve a résumé of all the complex social conditions in which it developed. But some indications of these causes may be found by proceeding in the opposite direction; by analysis rather than synthesis. If it is possible to distinguish the essential conditions on which are dependent the English and, let us say, the German systems, a reference to the historical facts affecting these main conditions should explain the main variations in the systems themselves. There seem to be three main conditions of which account must be taken: first, there is the wealth of the people, which determines the amount available for the banks to borrow; secondly, there is the general level of public confidence, which mainly determines the amount which the banks can borrow; and, finally, there is the character of the demand arising from trade and industry, which largely determines the nature of the services undertaken by the banks on the side of supply.

During the third quarter of the nineteenth century when the Credit banks of Germany were developing, that country was definitely poor;[18] at the same time, the general level of public confidence was comparatively low, a condition which, on the one hand, limited the power of the banks to borrow, and, on the other, encouraged the employment of a centralized note issue rather than the use of a cheque currency involving the lodgment of spare funds with individual banks. These conditions were in themselves sufficient to make simple deposit banking unprofitable, and they were reinforced by the character of the demand for capital arising from business men. For during this period German industry was passing very rapidly to a modern system based on large scale production, and there was consequently a heavy demand for the supply of capital for long periods for the creation and extension of industrial plant.

The special needs of the peasantry and small work-people were met by the creation of an elaborate system of People's banks, while the State, by facilitating the establishment of Mortgage banks, helped to provide the means by which the spare capital of the public was collected and made available for the development of agricultural and urban estates; special machinery was necessary to perform a similar office for industry. In these circumstances it was only natural that the main part of the German system should assume the form of "mixed banks" which undertook not only deposit banking but also the conversion and flotation of industrial undertakings; they are indeed "maids of all work." Their deposits are relatively small and their paid-up capitals are large; for their operations are more risky than those of the English banks, not only in their work of financing industry, but also in their commercial banking and in their large stock exchange transactions. Like the banks of this country, they are in process of rapid concentration and are extending their acceptance business; in pre-war days they made great and successful progress in developing foreign trade, not only by their organization for financing overseas commerce, but by acquiring control over the industries of other countries; finally, they are endeavouring to complete their organization by extending their cheque-making facilities and encouraging the more general use of this form of currency among the public.

In England the system of Joint-Stock banks was assuming its form during the second quarter of the nineteenth century. The country was growing rapidly rich; political and social institutions were stable and the level of confidence was high; moreover the happy accident of the Bank Act of 1844 encouraged the development of the cheque currency and consequently the lodgment of spare funds with the banks. While all these conditions were favourable to the growth of deposit banks, it would seem that the industrial need for capital was not of such a nature as to call for special machinery for its satisfaction. In England the transition of industry to its modern form was more gradual than in Germany; and after 1862 the demand for long-period capital to which it gave rise was satisfied in part by the legal facilities granted to joint-stock companies. But it seems reasonable to suppose that during the whole period the greater part of the demand was met from the rapidly accumulating wealth of manufacturers themselves and of the parties with whom they were in close business contact.[39] No doubt many other influences played their part in determining the form of the English banks; but those seem to explain in a great measure the character of the main body of the English system as a group of banks of deposit and issue, simple in function and homogeneous in type.

Any complete account of English banking must deal with the work of the small group of merchant bankers and of the London offices of the very numerous foreign and colonial banks. But the acceptance, foreign exchange, and issue work of these bodies does not bear very closely on the present discussion; accordingly, the argument of the following chapters is confined wholly to the work of the system of "cheque-paying" banks and their central institution, the Bank of England.

For many years there has been a strong movement of concentration among these banks which has resulted in the absorption of large numbers of small bankers and the growth of very powerful joint-stock institutions, several of whom have more than 500 branches, and lodgments which overshadow those of the Bank of England. This movement, due largely to the advantage of compounding risks and to the needs of large scale industry, has reduced the number of banks to about eight private firms and some forty-four joint-stock companies, and has left the English system (in 1914) a small group of specialized and highly centralized institutions with most of its power lodged in the hands of ten or a dozen of its most powerful members.[40] This system is in marked contrast with Continental banking. It is far more homogeneous and simple in its functions, each bank doing the same kind of work as its neighbour; there is no organization specially adapted to the needs of a particular industry, such as the agricultural mortgage banks of Germany; and there is nothing, except perhaps the Trust and Finance companies, which corresponds to the French and German Mortgage banks who raise capital by the issue of their own bonds and lend it for long periods to municipalities or against mortgages of real property. The system is more unified, more concentrated, than that of Germany, France or America; for example, in Germany, there were still in existence, in 1907, more than 4000 private bankers; in France some 2700.[41] Finally, owing partly to the great size of most of the English banks, partly to their large issues of cheque currency, their dependence on the central institution is much less than in France and Germany where the power of the State banks is greatly increased by their large issues of bank-notes.

The following table gives a statement roughly representative of the position of the English banking system as a whole at the end of 1913. Some of the figures are conjectural; most of them are for various reasons a little inaccurate; but they serve to give a general impression of the scope and character of the operations of the system, which is all that is required for the purpose of the argument which follows.

ESTIMATES OF THE AGGREGATE LIABILITIES AND ASSETS OF THE BANK OF ENGLAND AND THE JOINT-STOCK AND PRIVATE BANKS OF ENGLAND AND WALES, ROUGHLY CORRECTED FOR DUPLICATION, ETC., AS AT THE END OF 1913 [42]

		£ m.			£ m.
Capital, Reserves and Undivided Profits		109	Gold, Silver and Bronze, say		100
Lodgments—			Cash at Call and Short Notice, approxmately		104
On Current A/c, say	£560		Investments		138
On Deposit A/c, say	280	840	Discounts (about one-quarter) and Loans		609
Notes		9	Miscellaneous: Uncleared Cheques, say	£8	
Miscellaneous Items		6	Buildings	5	13
		£964 m.			£964 m.

The work done by the English banking system includes a variety of minor services such as the purchase and sale of securities through the banks' brokers, the safe custody of valuables, the collection of coupons and bills of exchange, the issue of drafts and letters of credit and so on. It includes also Savings bank arrangements and an increasing amount of acceptance and foreign exchange work. But these functions are relatively of quite minor importance and do not appreciably modify the simple character of the English system. Essentially the system is composed of banks of deposit and issue. Its social contribution consists, therefore, of two services: the first is the transport of capital; the second is the provision of a currency. These two services, though intimately connected in practice, are quite distinct in theory.

The first service consists in carrying capital (or, more accurately, command over capital) from those who have it to those who use it. This work is essentially independent of the nature of the currency, and may be carried out with a circulating medium of paper, gold or any other of the many different materials which from time to time have served the purpose of money. Let us suppose that this work of transport comes first in order of development and assume, for the moment, that the currency consists wholly of gold. In these circumstances the public will retain in pockets and cash-boxes the quantity of gold which they need to carry through their monetary transactions, and will lodge with the banks the gold which they do not require for these purposes but which they nevertheless wish to have in the readily available form of a bank deposit. The aggregate of these lodgments (added to paid-up capital and accumulated reserves) will then form the total resources at the disposal of the banking system; that is to say, the stock of gold lodged with the banks in this way will govern the amount of their loans just as definitely as the wholesaler's supplies to retail shops are governed by the stocks which he receives from the manufacturers. Bankers, retaining like any other business men a part of their resources to meet current demands and possible emergencies, will convey this gold into the hands of business men and others who bid for its use, an operation which their wide business connexions and expert knowledge enable them to do with great economy in trouble and risk. In these simple conditions then, the banks' social function consists only in retailing capital; or more precisely, in the distribution of capital among those who offer the highest net rate for its use—those presumably who employ it in the uses in which its yield is highest.

We may now suppose the banks to superimpose on this simple work of transport their second service of supplying a paper currency. This second service is evidently entirely different in nature; it consists in the partial substitution for this medium, gold, of their own circulating medium, the cheque, or deposit, currency. In effect the banks offer to supply the public with cheque-making facilities in exchange for the use of the gold which is still held in pockets and cash-boxes. Accordingly the greater part of the remaining stock of gold is lodged with the banks as a basis for cheque-making; the public obtaining at no greater cost to themselves a more convenient means of carrying out their transactions; the banks undertaking additional work and recovering payment for it from the use of the increased quantity of resources placed at their disposal.

It must be noticed that this substitution of paper for gold is not a thing *sui generis*. Money forms part of the system of transport and must be included with railways and ships as the means by which goods are transferred from one person to another. The substitution of paper for gold is therefore quite similar in its effects to the replacement of wood by steel in trading ships; in each case it results in a reduction in the cost of conveyance of goods. As already noticed, this substitution increases the resources at the disposal of the banks; it increases, therefore, the importance of their work as transporters of capital; but it does more than this, for it enables them to shift these resources from point to point in accordance with the needs of borrowers far more cheaply and rapidly than would be possible with a currency composed of gold or some similar material.

This preliminary consideration of the work of the English banks leads to the following simple and concrete view of their operations. The public make over to the banks the use of two parts of their total wealth. The first, consisting of a share of that fraction of their resources which they invest in a readily available form, gives rise to lodgments on deposit account yielding a rate of interest. The second, consisting of the greater part of that fraction of their resources which they hold in the form of money, gives rise to lodgments on current account yielding the services of the cheque currency. Together, these lodgments convey to the banks a control over a specific fraction of the country's resources; when added to capital and reserve funds they constitute the total resources at the disposal of the banking system, and consequently govern absolutely the quantity of command over capital which can be carried into the hands of borrowers, that is to say, the volume of the banks' loans. According to this provisional view, then, the banks obtain resources partly in exchange for a rate of interest, partly in exchange for cheque-making facilities; they combine these with their capital and reserve funds and distribute the total among the various employments open to them. So far, then, banking appears as a comparatively simple matter and gives rise to three main questions. First, the economy effected by the system in making available for productive employment the small and individually useless items of capital of which lodgments are composed—an economy measured inversely by the size of the banks' reserves; second, the efficiency with which they distribute these resources among their various uses and the loan policy governing that distribution; finally, the greater convenience of the cheque currency which they supply. These questions are dealt with in the first three of the following chapters.

There can be little doubt that the view which has just been stated represents the fundamental facts of the situation—the main influences permanently underlying and determining the banks' operations. The view is complete enough as regards lodgments on deposit account, but it makes an assumption with regard to lodgments on current account which tacitly excludes the most difficult questions which the banks are called upon to face. It assumes that, whatever may be the volume of money work, the public are able to hold in the form of cheque currency just that fraction of their resources which from time to time is necessary to carry through that work. In point of fact, however, the power to vary the volume of the cheque currency in accordance with the volume of work to be done rests only to a small extent with the public. It rests mainly with the banks. And this fact introduces a new set of considerations and a point of view very different from that which has just been stated.

In dealing with the substitution of the cheque currency for gold it has been supposed that the public brought their gold to the banks, lodged it on current account and obtained in exchange cheque-making facilities. The public still can, and do, obtain supplies of cheque currency in this way; but it is evident that, when once the substitution is fairly complete, the increasing supplies required to carry through the growing volume of money work must be obtained in another manner. They must be issued by the banks as notes are issued—namely, by way of loan. Accordingly the typical method of issue becomes one by which the banks grant cheque-making facilities to borrowers, the cheques drawn by these borrowers reappearing as an increase in the lodgments of other parties, and the total volume of lodgments on current account, *i.e.* the volume of cheque currency outstanding, showing a corresponding increase. In actual practice, therefore, loans precede lodgments and, in a sense, create them. The banks are free, so far as legal restrictions are concerned, to lend as much as they choose; each expansion in their loans is followed by an increase in lodgments, and there appears to be nothing in the actual mechanism of the operation which need prevent this process from being continued indefinitely. It is clear that when the banks arbitrarily expand their loans in this way they are transferring to borrowers a command over capital which they compulsorily abstract from the community; for their action increases the volume of lodgments and so lowers the purchasing power of each unit of currency in the hands of the public. Its effects are seen in rising prices and other signs, showing that the purchasing power of the country is in excess of its needs.

These considerations give rise to a new set of questions. They require us to consider, in the first place, whether the supply of currency, like that of other commodities, can be left to the ordinary play of market influences, or whether the peculiarities of a currency and the consequences of a maladjustment in its supply are so important as to call for special measures of regulation. Given the need for unified and deliberate regulation it becomes necessary to ascertain whether the supply of this currency is sufficiently elastic and the points in the system at which the power to control this supply is lodged. Finally, we have to discuss the manner in which supplies are in fact controlled, and whether any modification in the loan policy of the banks would lead to a closer adjustment between the volume of their cheque currency and the volume of the money work which that currency has to carry through. These questions are taken up in that order in later chapters on this subject.

We have, then, these two points of view. The one, taking account of ultimate social facts, represents the loans of the banks as governed by their lodgments, and these lodgments as governed in their turn by the fact that they are portions of the public wealth set aside for more or less specific purposes. The alternative view takes account of the practical difficulties of adapting the supply of cheque currency to the public needs. It recognizes that the banks issue their currency by means of loans which reappear as lodgments, and consequently that the volume of lodgments is governed by the volume of loans, which in its turn is governed by the will of the banks.

The apparent antagonism between these two points of view seems to be the source of most of the difficulties in reaching conclusions as to the true meaning of banking operations. From one point of view lodgments consist of real wealth and govern loans; from the other, loans consist of paper and govern lodgments It is clear, however, that the two views are not antagonistic but complementary to one another; the former describes the adjustment which social interests require; the latter describes the means by which this adjustment is, or may be, effected. The banks may vary the amount of their loans and consequently the amount of their lodgments as they please; but their own safety and the welfare of society depends on their maintaining the volume of lodgments on current account at a level just sufficient to enable the public to carry through the volume of their money work without disturbing the general level of prices; the volume of cheque currency being rightly adjusted, lodgments on deposit account are also in equilibrium. If the banks lend more than this they are in effect making a forced levy by reducing the value of each unit of money in the hands of the public; they are merely diluting the cheque currency which they have already issued and disturbing the economic organization by supplying purchasing power in excess of the country's needs. If they lend less than this, they fail in their task of supplying people with the means for carrying through their money work. If, however, they lend just this amount and no more, the system is in equilibrium; the banks are carrying into the hands of borrowers a command over capital which the public have made over to them; their lodgments and their loans represent wealth as truly as though they had been made in gold coin.

In the following chapters the argument will deal in more detail, and in the same order, with the various questions touched on in this preliminary statement. In the earlier chapters it will be assumed that the banking system is in the equilibrium which has just been described. Throughout, the discussion will deal primarily with conditions in which an effective gold standard is in operation; that is to say, with a condition which existed in pre-war days and with a condition which may reasonably be expected to be re-established in a few years' time. The rapidly changing circumstances of the intermediate period give rise to special problems which need more detailed and realistic treatment than is possible in these pages.

CHAPTER XX

THE TRANSPORT OF CAPITAL; ITS COLLECTION AND POOLING

THE English Deposit Banks in their work as transporters of capital effect two economies. By collecting and pooling small items of capital individually unimportant they make a large stock of capital permanently available for business and other uses. As expert lenders they supply this capital to borrowers at low gross rates. These economies need separate consideration.

In 1914 the aggregate lodgments of these English banks amounted to some £840 m. This aggregate, collected at about 5000 branches, was composed of many hundred thousands of individual lodgments, each one of which, broadly speaking, was repayable in gold on demand. The typical lodgment consists, therefore, of a quantity of resources comparatively small in amount and supplied for a short, or at any rate, a very uncertain period of time. Regarded as a supply of capital the individual lodgment taken by itself is practically valueless for business purposes; either its insignificant amount would make the cost of marketing it disproportionately high or its liability to be recalled at any moment would make it useless for employment for ordinary business purposes. When, however, these hundreds of thousands of individual lodgments are compounded in one organization two results automatically follow: the small *quantities* of capital are formed into one large aggregate; and, the ebb and flow of one account being set off by the flow and ebb of another, the short *lengths* of capital are also added together; the net result being that a proportion of the capital lodged becomes available for continuous employment in trade and industry. The measure, therefore, of the first economy produced by the banking system is the effect of this pooling operation in releasing capital for profitable employment.

The proportion of their lodgments which the banks are able to employ effectively, or, inversely, the proportionate size of their reserves, is determined immediately by experience of what is at the same time economical and safe. This experience sums up the effects of many more remote influences lying partly in the circumstances in which the banking system operates, partly in the nature of the system itself.

The proportion of reserves to lodgments will naturally vary as between one country and another. It will depend on the stability of political and social institutions and on the wealth and character of the people, for these conditions will largely determine the possibilities of sudden demands for the withdrawal of lodgments. It will depend also on the extent to which the system is exposed to demands for gold or other legal tender originating in the exigencies of foreign countries, or in home fluctuations arising from such causes as seasonal variations in the volume of payments to be effected by means of coin and notes: the former source of disturbance is particularly important in England owing to her international position in finance; the latter is especially marked in France during the harvest period and in Germany at the turn of the quarter. It will depend, further, on the character of the deposits which the public lodge with the banks; for a balance of £100,000 held by a foreign Government at the head office of a London bank evidently calls for a far higher reserve than £100,000 composed of a thousand independent balances whose movements largely cancel one another.

In addition to these external influences affecting the size of the banks' reserves are those arising from the nature of the system itself. The efficiency of the system in this part of its work depends mainly upon the absolute number of lodgments it collects and the degree of independence in their movements; for if this independence disappears in the face of financial mistrust leading to a general withdrawal of lodgments, the whole basis of the operation vanishes. Its efficiency will be mainly determined, therefore, first, by the reputation of the individual banks composing the system (a reputation depending partly on the size of their paid-up capital and accumulated reserve funds); for the greater the public confidence, the larger is likely to be the number of lodgments and the smaller the risk of a general withdrawal by the public. It will be influenced, secondly, by the development of the unified systems of branch offices which is typical of English banking, or by the communities of interest more common in Germany; for the larger the number of offices controlled by a single bank, the more fully will the fluctuations of individual lodgments be pooled. Finally, when a central institution holds the cash balances of the individual banks and pools the fluctuations of these balances, the maximum economy of reserves is obtained and the largest possible fraction of the aggregate lodgments becomes available for productive employment. These considerations formed, no doubt, only a part of the reasons which led the U.S.A. to adopt a centralized system of banking; but it is clear that, apart from legal regulation, the aggregate reserves held by their 30,000 small, independent banks must of necessity have been proportionately far larger than will now be required, and consequently that the recent reform is likely to effect a very appreciable economy.

It is worth noticing at this point that estimates of the relative strength of any two banking systems based on a comparison between their proportionate reserves are difficult to make, not merely because of the differences in the organization of the systems and of the conditions in which they operate, but also because the comparison may be obscured by differences in methods of bookkeeping. When, for example, a bank agrees to lend a business man £1000, it may do so in either of two ways. It may, in the one case, open a loan account for £1000 in his name and simultaneously credit him on current account with a similar amount; or it may, in the other case, grant him a "line of overdraft" of £1000, allowing him to overdraw to that extent as and when he chooses. In the former case lodgments are immediately increased by £1000; in the latter, they may be gradually increased to about this amount. If the same *absolute* amount of reserve is held against the new liability in each case, the *proportionate* amount of reserve will appear lower under the former method when lodgments are immediately increased by £1000, than under the latter when they are gradually increased as the power to overdraw is exercised.

The English banks make their advances partly by way of loan, partly by way of overdraft. A simple statement of the ratio between their reserves and their lodgments, therefore, will give an accurate idea of their ability to meet contingencies only if it is supplemented by information as to the extent to which they have lent in one way or the other. Further, any comparison of the strength of their position, which is based on a change in this ratio as between one time and another, may have been made inaccurate by a change from one method of lending to the other during the interval.

In England the external circumstances in which the banking system operates are especially favourable; at the same time, the reputation of the banks of which it is composed is very high and their organization very economical. They are able, therefore, to pool the fluctuations of their lodgments more effectively than any other system which has yet been devised.

The proportion of these total lodgments which the banks as a whole are, in fact, able to release for productive uses is not shown exactly by the total of their loans, for the resources at their disposal for lending purposes include not only their aggregate lodgments but also their paid-up capital and accumulated reserve funds. This proportion (in 1914) is most conveniently found therefore by considering the size of that fraction of their lodgments which they are unable to lend, that is to say, the stock of gold and silver which they must retain in order to meet demands for repayment of lodgments in cash.

A net withdrawal of lodgments may occur daily for the purpose of effecting minor cash transactions, weekly for the payment of wages, seasonally for holiday and other expenditure, cyclically to meet the larger cash needs of more active business and conceivably in consequence of a widespread lack of confidence in the banks. A cash balance is held by each branch of a bank to meet immediate contingencies; minor fluctuations in the balances of individual branches are pooled by the head office; fluctuations in the balances of individual banks are pooled by the Bank of England. To this must be added the gold and silver held by the Bank of England, partly for the purposes already described, partly in order to meet foreign demands. The grand total amounting to some £100 m. represents that fraction of its total lodgments which the banking system is unable to lend out at interest. The whole of the remainder, say, £740 m., is released for employment in productive uses. This aggregate, seven-eighths of the total lodgments, may then be regarded as a stock permanently lodged with the banking system, though continuously shifted from one account to another in response to cheque payments made by depositors.

This shifting of lodgments within the banking system does not appreciably affect the total resources controlled by the system as a whole; but it is a matter of the greatest importance to the individual banks of which the system is composed, and forms one of the reasons which require them to keep further reserves much larger in amount, though different in kind from those which have just been discussed. The movement of lodgments from one bank to another is adjusted daily by means of the Clearing House, each bank presenting cheques on other banks paid in by its customers and receiving from these other banks cheques on itself; the balance being paid or received by a draft on the Bank of England. Normally the net balance which any one of the Joint-Stock banks pays or receives to complete the daily settlement may be small and the amount of its lodgment with the Bank of England consequently little affected; but the occasional fluctuations in this balance may be very large. If, for example, Lloyds Bank were receiving subscriptions for a foreign loan of £20 m., lodgments to the extent of perhaps £15 m. might be shifted from banks in general to Lloyds in particular. Other banks would need to deplete their lodgments at the Bank of England by £15 m., and Lloyds' balance at the central bank would be increased by a similar amount. But there is no need to enter into any further detail on this point. The important fact is that, owing to the movement of lodgments within the banking system, individual banks are obliged not only to keep considerable balances at the Bank of England, but also to increase the proportion of their resources which they hold in a readily available form. The aggregate amount which the banking system held (in 1914) "at call and short notice" was about £104 m., or one-eighth of the aggregate lodgments; this amount, together with the funds similarly held by the Foreign and Colonial banks, was the main source of supply of the short loan market. It must be noticed that the necessity for this reserve arises largely from the fact that the system is composed of individual banks; as the number of separate banks declines, the movement of lodgments is pooled by each to an increasing extent, and the need to hold a reserve against this movement declines in a corresponding degree; if, finally, the system were composed of a single bank, the movement of lodgments would be completely pooled and the need to hold a reserve of "cash at call and short notice," at any rate for this particular purpose, would disappear. This reserve of "short money" differs from the reserve of gold inasmuch as it is lent to the business community and consequently employed in productive uses; but as it is lent only for short periods it requires borrowers to bear the risks arising from the fact that it can be recalled at short notice; these risks, therefore, constitute the social cost of maintaining this reserve.

In estimating finally the net economy effected by the banks' pooling operation, we have to take account of two things. First, some allowance must be made for the fact that although individual lodgments consist mainly of small quantities and short lengths of capital they would not be wholly unavailable for business use in the absence of the banks; for some part of the lodgments, at any rate on deposit account, could in such circumstances be invested by their owners in negotiable securities or in other ways. Lodgments on deposit account form, however, only a minor part of the banks' total lodgments, and the allowance to be made under this head is probably not a large one; it seems safe to assume that the proportion of the total lodgments to which the pooling operation can be considered to apply is not less than five-sixths, say, £700 m.

The second consideration is the fraction of this £700 m. which the banks are, in fact, able to release for productive employment. Owing primarily to the public confidence in the banks and secondarily to the centralization of the reserve, the fraction of these lodgments which cannot be lent, *i.e.* the quantity of gold and silver held to meet lodgments actually withdrawn from the banking system, is extremely small and amounts perhaps to £100 m. So far, therefore, the pooling operation may be said to liberate £600 m. of resources for profitable use. But owing partly to the circumstance that the system is composed of individual banks and partly to the need to provide against uncertain contingencies, some £10¾ m. of these resources are lent only for short periods, and consequently result in special risks falling upon those who employ them. We conclude finally, then, that the high business reputation and economical organization of the system enable the banks to effect an economy whose amount is measured by the profitable use, subject in part to certain risks, of some £600 m. of resources otherwise unavailable for productive employment. At 3⅓ per cent, the net rate of interest in 1913, this represents an annual gain of some £20 m.

This economy represents, of course, not a net but a gross saving. It is derived from the effective use of lodgments obtained on both deposit and current account. The profit from the use of the former kind of lodgment is paid over to depositors in the form of a rate of interest which represents in the main a net social gain. That from the latter kind is paid over in the form of cheque-making facilities whose costs of supply must be deducted from the gross economy effected. It may not be assumed that the cost of the cheque currency is necessarily less than that of the gold it replaces. The substitution of the cheque currency for gold means the transfer of the costs of production of the currency from the Mint to the banks; and although the analogy of a note issue may suggest that the banks must obtain a surplus on their issues, the view seems to be fallacious. This point will be dealt with in a later chapter; for the moment, therefore, the statement may be allowed to stand that the cheque currency has a cost of production like any other commodity, and that the economy resulting from its substitution for gold is to be measured primarily by its superior efficiency in effecting exchanges. The remaining economy resulting from the operations of the banks as transporters of capital lies in their work as expert lenders; this is considered in the following chapter.

CHAPTER XXI

THE TRANSPORT OF CAPITAL; ITS DISTRIBUTION

IN this chapter we are concerned with the manner in which the banks normally distribute the resources at their disposal. We deal with their loan policy, therefore, only in a preliminary way, taking account of those considerations which constitute "practical banking," and postponing to a later chapter the consideration of those influences which determine fluctuations in the aggregate volume of loans and lodgments. In other words, we deal with that part of their loan policy which is concerned with the distribution of a given quantity of Command over Capital, and leave for later consideration that more difficult part of their loan policy which is concerned with the regulation of the total amount of Command over Capital which they supply. For this purpose we may employ the figures of the 1913 balance sheet given on page 128.

The resources controlled by the banks consist of lodgments and notes to the amount of about £850 m. and capital and reserve funds amounting to £109 m., giving a grand total of some £960 m. Their distribution is naturally governed by two main considerations. On the one hand are the ordinary business interests which require that the largest possible fraction of these resources should be devoted to profitable employment. On the other hand is the ordinary business need to make provision for contingencies.

The manner in which those resources are employed must necessarily be governed very largely by the conditions on which they are obtained. The fact, therefore, that nearly 90 per cent of their total resources are repayable practically on demand must be one of the dominating considerations in the minds of bankers when distributing the resources at their disposal. Long experience, it is true, has clearly exposed the extent of the normal ebb and flow of resources from and to the system in the course of the yearly cycle, and has no doubt made it more easy to estimate the amount of the payments which individual banks have to meet as a result of the shifting of lodgments from one bank to another within the system. But every year brings its own emergencies, and the banks cannot, simply by basing their policy on past experience, shake themselves free of the fact that a large proportion of their lodgments are repayable on demand; they must provide a large margin for the uncertain contingencies of the future.

These conflicting considerations of what is profitable and what is safe express themselves in a loan policy which aims at maintaining a certain definite proportion between liabilities and reserves. The main principle governing the loan policy of the Joint-Stock banks, and presumably of the private bankers also, is therefore that their Cash in Hand and at Bankers, their Investments, and their Money at Call and Short Notice should each, subject to a limited degree of interchangeability between the three, constitute a certain definite fraction of their lodgments. Of these proportions the most important is that relating lodgments and "cash." This fraction is no doubt lowest where the need is greatest, namely, among the small private banks whose fate may be bound up with the prosperity of a single industry or at any rate of a small geographical area. The proportion actually adopted by the Joint-Stock banks naturally differs with the special conditions of each; for it must depend upon the judgment of its directors, on the extent to which the bank can pool the fluctuating demands of the various industries and trades with which it deals, on the character of its loans and lodgments and so on. The monthly statements of eleven large Joint-Stock banks show that their aggregate, or average, proportion is a fairly stable one; for example, during the year ending April 1914 (probably rather an exceptional period) the fraction of their total Cash in Hand and at Bank of England to their total lodgments varied only about 1 per cent from the average, the extreme figures being 14·9 per cent and 16·8 per cent. The proportion on which the loan policy of the Bank of England largely depends—that between the reserve in the banking department and its total lodgments—naturally varies within much wider limits, for upon the central bank of the system fall practically the whole of the yearly fluctuations in the demand for cash and cheque currency; during 1913 this proportion varied from 30 per cent to 61 per cent.

It should be noticed that the proportionate figures which have been quoted are misleading in so far as they show the relation of reserves to lodgments at a moment of time. Banking policy does not, of course, aim at maintaining a rigid and invariable proportion, whatever the circumstances at the moment; it is based rather on an average of existing conditions and those foreseen in the immediate future. A Bank of England proportion of 30 per cent, with the prospect of an early inflow of gold or repayment of loans, may indicate a stronger position than a proportion of 61 per cent with a less favourable outlook. With these important relations between lodgments and reserves we shall be more concerned in later chapters dealing with the regulation of the total volume of loans; at the moment we need chiefly to distinguish the nature of the various uses in which the banks' resources are employed.

Little need be said on the subject of the £138 m. held in the form of Investments. But it may be noticed that these holdings are not investments in quite the usual meaning of the term; they are selected not so much on the ground of their net yield as of their wide and immediate marketability; their primary character, therefore, is that of a reserve.

A further and more important reserve consists of "Money at call and short notice," amounting approximately to £104 m. A very large proportion of this is recallable within a week, the whole perhaps is recallable within a month; that is so, at any rate, in the case of one of the large banks. Some part of this money is lent to the Stock Exchange for fortnightly periods at fairly high rates which are fixed by mutual agreement among the bankers. The result of confidential inquiry into the volume of loans outstanding with the London Stock Exchange at the outbreak of war showed, it is believed, a total of about £80 m.[43] As this amount was probably less than was commonly anticipated it cannot be considered as abnormal. Some of it, no doubt, was borrowed from Discount Houses and similar sources, but the great bulk of it must have been supplied by the Joint-Stock Foreign and Colonial banks. But much the greater part of the short money supplied by the banks with which we are here concerned appears to go to bill brokers either by the purchase of bills nearing maturity or in the form of loans at call or for periods not exceeding a week.[44] These bill brokers consist of two or three large Discount Houses and about twenty private firms. Primarily they are specialists in bills; but the economy which they effect by virtue of their special knowledge of this particular kind of security is not, it would seem, the only service they perform. For the effect of their operations is, in some measure, to convert "short" into "long" money; they gather up short lengths of capital from a large number of the London banks, combine these with their own capital and with that borrowed from other sources and lend out this aggregate all over the country for periods suited to the needs of commerce.

In considering, therefore, the real social cost of the reserve of short money held by the banks, allowance must be made for the work done by the market in making this money available for longer periods. The whole of the "short money" which is held by the banks in the form of investments is converted into "long money" by the organization of the Stock Exchange, while much of the remainder is similarly treated by the bill brokers. The real cost of this reserve is therefore less than it appeared in the discussion of the previous chapter; it must be taken to consist partly of work done by jobbers and brokers on the Stock Exchange and by brokers in the bill market, and partly of the additional risks borne by business men who borrow from the banks with the liability to repay at short notice.

The manner in which the remaining £600 m. of the banks' resources are supplied to trade and industry has been determined to an appreciable extent by the policy of the private banks which have now to a great extent been absorbed. No doubt, as time passes and the long loans made by those private banks are gradually recovered, the position of the modern banks will be materially improved, their resources being distributed in advances both better secured and more readily recoverable. The substitution for the small private bank of the large joint-stock concern marks then a change in the character of bank loans; not only is a larger proportion held in cash and short money, but advances are made for shorter periods and against better security.

This substitution is accompanied by a change to a more centralized form of management and a further modification of loan policy. The influential and responsible local banker is replaced by the more mechanically trained branch manager, less well informed on local matters and closely controlled by his general manager, whose sanction must normally be obtained before the grant of an advance of any considerable size. In these circumstances it is inevitable that local knowledge of persons should play a smaller part than formerly in the banks' loan policy and that this policy, being determined rather more by the nature of the security offered than by the character and ability of the borrower, should tend to exclude from these borrowers business men who may be unable to offer security for a supply of capital but whose character and abilities give them a good social title to its use.

The policy adopted by the banks in lending this part of their resources is necessarily influenced by the possibility that large amounts of their lodgments may at any moment be withdrawn or transferred elsewhere; their requirements are most completely met, therefore, when they finance a short trade process represented by a sound commercial bill, for the bill has a market and could be sold if necessary; moreover, it automatically becomes cash at a known and not distant date.

But a more important influence on loan policy must be the character of the demand. The possibilities of the bill, as a means by which the demand of the small business man can become effective, are little developed in England as compared with France. In that country, banks discount bills of five francs and upwards, and the total number of bills dealt with is extremely large. The number taxed in 1912 exceeded 108 millions, with an aggregate value of £1800 m.; of these more than 60 millions were drawn for sums less than 100 frs. In Germany, where the commercial bill is much less widely used, the total value of the bills taxed in 1913 (excluding certain foreign bills) was £1700 m., their average value being much higher than in France. In the United Kingdom the total value of bills taxed in 1913 (excluding sight bills) was approximately the same.[45]

The guarantee is still of considerable importance as a personal security; but, apart from bills of exchange, the property employed in trade and industry does not usually give rise to a security acceptable to a banker. The huge increase in the quantity of negotiable securities and their wider distribution must, therefore, have a marked effect in reducing the risks falling on the banks and widening the effective demand for the capital they supply. If they can lend most of their resources against good security for fairly short periods, it is unreasonable to expect them to revert to the practice of the old private banks and to adopt the more risky policy which would be necessary in order to meet the demand for long-period capital in industries which offer less adequate security for loans.

It is probably true that practically all London loans and the great majority of country loans are secured; the security obtained naturally varies widely, but it does not exclude such charges as mortgages of land and business premises. Nominally these loans are usually for short periods, say six months; in fact, however, they may frequently run for periods of years. There can be no doubt, therefore, that, as a result partly of their own, partly of their predecessors' policy, a considerable part of the banks' advances is supplied for periods extending to several years.

It is an obvious fact that the parties who lodge their resources with the banks have, generally speaking, no knowledge whatever of the parties by whom those resources are employed. But the fact is worth emphasizing, as it shows how great is the economic gap bridged by the banking organization. The essential means by which this gap is bridged is the system of local offices, numbering in 1914 about 5000; this system is supplemented and its efficiency increased by the use of the cheque currency. The effective manner in which the system serves to collect and compound fragments of capital has already been dealt with; it is no less effective in that part of the banks' work which we are now considering—the distribution of this capital at low and even rates throughout the country.

With a gold currency, lodgments collected in areas of plenty would have to be carried to areas of scarcity in the form of metal, and geographical distance would exercise a material influence on loan rates. In effect lodgments are still transported from one part of the country to another, but practically all costs of carriage are abolished by the mechanism of the cheque currency. Thus, the grant of a loan by a branch bank must normally coincide with either an increase of lodgments or a reduction of loans in some other branch of the bank; loans are simultaneously extinguished at one point and extended at another, so that in effect resources are transported by entries in the books of the Head Office. Having decided to grant a loan, the branch bank need take little or no account of its stock of gold or notes; with the sanction of its Head Office, it creates, itself, the currency which is required by granting cheque-making facilities to its borrower. Moreover, the effect of the cheque currency is not only to abolish costs of transport, but greatly to increase the rapidity with which capital may be placed at the disposal of business men, enabling them to undertake operations which a few days' delay might render useless or unprofitable.

The branch bank system and the cheque currency are then the two important material sources of the economy with which the banks distribute the capital at their disposal. This economy is an important one, for it would, perhaps, be a fair illustration to assume that capital obtained in Devonshire at 2 per cent, or its equivalent in currency services, was carried to Yorkshire and lent there at rates not exceeding 4 per cent. But the economy is probably not as great as it might be. Costs of transport have been abolished, but loan rates are not level throughout the country; they tend to a lower level in the North than in the South, a result almost certainly due to differences in the keenness of bargaining. Competition among the banks has increased in a marked manner during recent years; but there is every reason to suppose that their profits are still higher than is necessary. The old tradition of banking still lingers, and many people do not care to make their banking account the subject of a bargain. Hence bankers are often able not only to maintain loan rates above their competitive level, but what is probably more important, are frequently able to obtain lodgments on current account yielding a return much greater than the cost of the cheque-making facilities supplied in exchange.

Considering the English banks in their capacity as banks of deposit or transporters of capital, we have, then, the following conclusions. By means of their high reputation and comprehensive organization they are able to collect portions of capital most of which, apart from their operations, would be economically useless; combining these with their capital and reserves they compound them so effectively that a very large proportion is released as a practically permanent stock available for productive employment. Nevertheless, the fact that the total stock of capital at their disposal is in a large measure repayable on demand, requires them to supply it mainly, but by no means entirely, for those uses from which it can be readily recovered. Their organization enables them to shift this capital from one district to another with extreme ease, and consequently to redistribute it readily in response to the seasonal and other changes in the demands of trade and industry. Moreover, the rapidity with which they can supply capital at any point adapts them peculiarly to meet the temporary opportunities and emergencies of business, and consequently enables them, in effect, to ensure business men against many of the financial emergencies to which they are exposed.

CHAPTER XXII

THE PROVISION OF THE CHEQUE CURRENCY

IN order to complete the account of the normal economies effected by the banking system when in equilibrium, something must be said of its services in providing a currency which is unsurpassed in its efficiency as a means of effecting the kinds of payments which are most important in modern business conditions.

It was shown in Chapter VII that the cheque was especially adapted to carry through large and distant payments, and that the special advantages of this form of currency lay in the power to adapt each cheque in amount and in negotiability to the needs of each particular transaction. There is no need to emphasize further the economies in the dispatch of business which result from the use of this currency and we need not anticipate the argument of the following chapters by examining the further advantages which result from the elasticity of its supply; but something may be said on the subject of its supply price with a view to determining whether the issue of this currency, like the issue of bank-notes, yields abnormal profits to the parties who supply it.

The demand price for money, that is to say, the price which the public pay for any given quantity, is evidently the same whether they draw their supplies from the banks or from the Mint; it may be expressed in each case as the loss of interest on that part of their wealth which they hold in this form in order to effect their payments. This wealth may be kept at home in the form of sovereigns, or it may be lodged with a bank and employed for cheque-making purposes, in which case its price consists in the net rate of interest on the average balance of the account.

So much for demand; let us turn now to consider the expenses of production. The work involved in supplying a cheque currency is undoubtedly greater than that involved in the supply of bank-notes; but the question remains whether the costs of production of the cheque currency are such that they enable the banks to obtain abnormal profits from their issues. When banks are able, without legal restriction, to issue large quantities of notes, their costs of production in the way of clerical labour, reserves and printing may be considerable, but there can be little doubt that they necessarily obtain profits which are abnormally high (cf. pp. 165–6). It is true that the Scotch banks obtain no direct net profit from their note issues; but this, presumably, is due mainly to the legal restrictions imposed on them. In the case of the cheque currency it seems to be the fact that the banks do, but need not necessarily, obtain excessive profits from their issues.

From the present point of view the essential fact is that the banker who supplies cheque currency, unlike the banker who issues notes, records his relations with each party using his currency in the form of an account, which is, or may be, the subject of a bargain between his customer and himself. The banker is immediately and always concerned that the cost of the work done in connexion with any current account should not exceed the net rate of interest on the average balance lodged with him; on the other hand, the customer, if he is a business man, is usually concerned that the interest on this average balance should not be more than a fair price for the work done by the banker in supplying him with the services of the cheque currency. The work done by the banker is considerable. He has to maintain reserves and premises, to examine and collect cheques on other banks paid in by his customers, to examine and pay those drawn on himself, to pass those transactions through an elaborate system of books, to provide a copy of the customer's account in the form of a pass-book and to undertake a variety of miscellaneous services too numerous to state. Reducing these costs to some rough-and-ready measure, he examines his customers' accounts half-yearly or quarterly with a view to imposing his charges. From overdrawn accounts payment for work done is recovered by the imposition of a commission charge; so, too, with an account whose average balance is insufficiently remunerative; accounts whose balances are adequate escape any charge; those whose balances are large in proportion to the work they involve may sometimes, as a result of a prior agreement, be allowed a small rate of interest. It must be recognized, however that these are not the only considerations which determine the banker's charges; he is likely to consider the nature of his customer almost as carefully as the nature of the account. These uninteresting details are stated with the sole view of emphasizing the fact that every current account may be the subject of a bargain which, by determining the size of the average balance, the charge of a commission, or the allowance of interest, can ensure that the banker obtains in each case only a reasonable return for his services; in other words, that the cheque currency is supplied on terms which yield only a normal profit to the banker. It is no doubt the case that in actual practice, owing to imperfect bargaining between banker and customer, the banks often obtain excessive profits from lodgments on current account; but increasing competition is undoubtedly reducing these profits, and consequently bringing the cost of the cheque currency into closer relation with the price at which in effect it is sold.

The very high dividends on their paid-up capital which the English banks regularly distribute do not, of course, in themselves prove that the banks exploit their customers by charging unduly high prices for their services; for the capital which they employ consists not only of their paid-up capital but also of their very large reserve funds and of the immaterial organization—the reputation and goodwill—which has a cost of production and must consequently yield a return. Nevertheless, it seems to be true that the traditional relations between banker and customer in many cases still hamper effective bargaining between the two, and so enable the banker to obtain for his services a price which is in excess of truly competitive rates. This imperfect bargaining, as has just been noticed, affects the price at which he sells the cheque-making facilities he supplies; it affects also the price which he gets for his services as transporter of capital; for, as was noticed in Chapter XXI, the rates at which he lends are somewhat lower in the North of England, where the relations between banker and customer are on a more strictly business footing.

The general conclusion, then, to which this discussion leads is that there is nothing in the nature of the services supplied by the English Joint-Stock banks, whether in the provision of a currency or in the transport of capital, which necessarily results in their earning abnormally high profits on the full capital which they employ, but that in fact the profits which they obtain are somewhat higher than is necessary owing to the imperfect bargaining between them and their customers.

This conclusion may need qualification in the near future, for it is tenable only so long as the present effective competition between the banks is maintained. What their future policy will be is a matter on which opinions differ; but it seems unreasonable to suppose that the five great banks which now (1920) control the bulk of English banking business will long neglect the opportunity of entering into working agreements to reduce the duplication of banking offices and to market their supplies at more profitable rates. In Scotland, according to Sir Charles Addis, competition has already been "practically eliminated by an arrangement between the eight principal banks not to outbid each other in the rates offered for deposits and advances." [46]

CHAPTER XXIII

THE VOLUME OF THE CURRENCY

SO far we have proceeded on the assumption that the banking system is in equilibrium; that is to say, that the volume of cheque currency supplied by the banks is just that amount which the public need to carry through their payments at the normal level of prices. On this assumption the operations of the banks in collecting and distributing resources appear to be as simple and concrete as those, for example, of the Maypole Dairy Co., who collect their produce from many sources and distribute it by means of a system of branch establishments to their customers throughout the country.

In fact, however, this equilibrium is rarely or never attained; it is constantly being disturbed by changes in the Demand and Supply of currency, and the banking system is constantly adjusting itself to these changes and endeavouring to re-establish the equilibrium which has been disturbed. In order to investigate these conditions it is necessary to come closer to the actual facts; in particular to consider the method by which the cheque currency is issued and the manner in which its supply is, and should be, controlled. In this investigation we are concerned only with a part of the banks' lodgments; only with the volume of lodgments on current account which are employed for cheque-making purposes and which constitute the volume of the cheque currency. It will be convenient, therefore, to neglect altogether the lodgments obtained by the banks on deposit account, and to proceed for the present on the assumption that these resources are obtained only in exchange for cheque-making facilities. This assumption will not affect the substance of the argument, and will greatly simplify the wording.

The first point to notice is the method by which the cheque currency is issued. In actual practice, as is well recognized, the supply of cheque currency, *i.e.*, the volume of bank lodgments, is expanded and contracted by changes in the volume of bank loans. In the actual order of events loans precede lodgments and, in a certain practical sense, create them. The banks increase their loans by granting an extension of cheque-making facilities to borrowers; the cheques drawn by these borrowers, being transferred to other parties and paid by them into their banking accounts, reappear in the form of lodgments. An increase in loans is followed, therefore, by an increase in lodgments; the banks lend more and their lodgments are still further increased. At first sight there appears to be nothing in the actual mechanism of the operation which need prevent this process from being continued indefinitely. In fact, however, there are limits actually set by the nature of the mechanism and limits which should be set by considerations of social interest.

The first limitation arises from the fact that a persistent increase in the cheque currency (unaccompanied by a corresponding increase in the volume of money work to be done) increases the quantity of purchasing power in the hands of the public and thereby raises the general level of prices, or, in other words, lowers the purchasing power of the sovereign. A fall in the internal value of gold, like a fall in the home value of any other commodity, encourages its export; it leads also to a withdrawal of lodgments in the form of the legal tender money required for larger wage and retail payments; and this twofold drain, by depleting the banks' reserves, compels a contraction in the volume of the cheque currency.

This tendency for gold, or any other thing, to flow outwards when its home value is relatively low, and to flow inwards when its home value is relatively high, constitutes a "natural" regulation common to all commodities. It is an automatic reaction which sets in, however, only as a *result* of a change in the purchasing power of the sovereign, that is to say, *after* the disturbance has occurred.

This "natural" adjustment operates in the direction required by the social interest, but it operates crudely. Fluctuations in the value of most commodities are not of very great importance, and these values are steadied sufficiently well by these "natural" influences which cause them to flow to the places in which they are in most urgent demand. But, even among ordinary commodities, these fluctuations may cause business disturbances sufficiently damaging to give some justification to deliberate regulation on the part of associations of producers, such as those which control the prices of steel products in this country.

The case is far stronger as regards money. In the first place, the general practice of modern countries to multiply a central stock of gold into a far larger stock of credit currency for internal use carries with it the consequence that the volume of this currency is much more sensitive than would otherwise be the case; for not only is this volume likely to vary arbitrarily with changes in the level of confidence, but it will also tend to vary largely in response to a relatively small change in the size of the central gold reserve. In the second place, the variations in the value of the sovereign introduce social disturbances so serious in character that, as Dr. Marshall expresses it, "it is worth while to do much in order to diminish them a little." For these two reasons, then, it becomes necessary to supplement the action of the crude "natural" processes of readjustment by a more conscious and delicate regulation of Supply. We need, then, to define the position of equilibrium which is required in the general interest, and to investigate the possibility of the adoption by the banks of a loan policy which would anticipate and prevent the effects of the various influences by which the equilibrium is being constantly disturbed.

It has already been noticed that changes in the purchasing power of the sovereign set up a transfer of wealth which may, and often does, lead to serious social disturbances. It is quite conceivable that such changes might in certain conditions work for the social advantage. For the purpose of the present argument, however, it is not necessary to enter this debatable region and consider the manner in which the standard of value may be employed as an engine of social reform. It will give greater definiteness to the ideas, and will not be unfair if it is assumed simply that the social interest would be satisfied by maintaining the purchasing power of the sovereign as nearly as possible at a constant level. In order that this may be attained there must be a continuous adjustment of the volume of purchasing power to the volume of payments which it is required to carry through. On this understanding, then, the question to be dealt with is that of the part which can be played by the banks in maintaining this equilibrium between supply and demand.

Inasmuch as the banks supply only a part of the total volume of purchasing power, it is evident that there are limits to their power to control the value of the sovereign; variations in this value which arise, for example, from persistent changes in the profitableness of gold mining must be almost entirely outside their influence. To what extent can they, then, employ their control over the cheque currency to maintain the purchasing power of the sovereign at a constant level? It is clear, in the first place, that they should themselves refrain from disturbing this level by causing any contraction or expansion of the cheque currency which was not warranted by changes on the side of Demand. Further, as they have the power to vary the volume of this currency, they can endeavour to adapt supply to changes in the volume of money work. Finally, by judicious anticipation and counteraction they might intervene to check some of the temporary variations in the level, arising from causes which are outside their direct control.

In order to consider what they do, and what they might do, in this way, we have to examine briefly the machinery by which the cheque currency is controlled, the manner in which the banks control it, and any defects in the machinery or in their policy which it is within their power to remedy.

CHAPTER XXIV

THE ELASTICITY OF SUPPLY

IF the banks are to take effective action to control the value of the sovereign, it is essential that the currency which they supply should be capable of being readily expanded and contracted, and that the power to effect these changes in its volume should rest mainly in their own hands. The first questions to be considered, then, are the elasticity of the cheque currency and the points at which this elasticity is controlled.

With a purely gold currency, a continuous growth in the volume of money work would no doubt tend gradually to raise the value of the sovereign ; by so doing, it would stimulate the output of the metal from the mines and its withdrawal from the Arts, thereby increasing the quantity of gold available for money uses and checking the appreciation of the sovereign. But even in the unlikely event of "other things remaining unchanged" and time being given for this tendency to exert its full influence, its action would be likely to be feeble ; while during short periods of time such an automatic tendency to readjustment would be quite ineffective. In such circumstances, therefore, as the only manner in which changes of Demand could be met would be by varying the efficiency of the currency, that is to say, by making each coin do more or less work than before, every change in the volume of money work, whether temporary or persistent, would be likely to cause a change in the purchasing power of the sovereign. When, however, the currency consists mainly of titles to gold which are a multiple of a central stock, it evidently becomes possible by varying this multiple, to adapt the volume of the currency to at least some of the constantly occurring changes in Demand. We need to consider briefly the organization by which this multiplication is effected.

The stock of metal which this country takes from the international market and employs as the basis of its issues of currency consists of the gold and silver held in the reserves of the Bank of England and the tills of the Joint-Stock banks ; for practical purposes, however, we may take this central stock to be represented by the reserve of gold and notes held in the banking department of the Bank of England. This is the all-important reserve on which the operations of the Money Market are based. There is no need, for the purposes of this argument, to use any but rough figures; we may take the pre-war average amount of this reserve to be £30 m. The Bank of England, taking account of the demands for gold to which it may be exposed, of the private and public obligation laid upon it, to meet these demands and of the proportion which experience shows to be safe, lends against this reserve to the average amount of about £60 m. Of the lodgments so created some £20 m. are held by the Joint-Stock banks, and form, with their cash in hand and short money, the reserve which they, in their turn, may be regarded as multiplying into further lodgments. Their multiple, like that of the Bank of England, is determined mainly by what experience shows to be safe. In fact, the actual volume of lodgments resting on their reserves amounts to some £840 m., of which probably about £560 m. are the lodgments on current accounts which constitute their issues of cheque currency. There is yet a further, but probably an unimportant, multiplication of this currency due to the fact that a part of these lodgments are held by smaller banks and employed by them as a basis for additional issues. Inasmuch as it is the normal policy of the banks to hold a certain definite proportion of their total lodgments in the form of short loans, of investments and probably also of till money, it is not unreasonable to neglect these kinds of reserves for present purposes and to consider that the reserve in the banking department of the Bank of England is normally multiplied by a definite figure into a much larger volume of cheque currency which forms the principal means of effecting payments.

The link between these two amounts—the multiple which connects the reserve with the currency—is determined, as already noticed, largely by experience. This experience sums the effects of many influences which are the real determinants of the multiple: influences originating partly in the general social conditions in which the banking system operates, partly in the organization of the system itself (cf. pp. 135-6).

It is evident that these various influences are susceptible of gradual change as the social and banking organization develops, and that in course of time such changes bring about an alteration of the normal multiple and consequently an alteration in the volume of Supply. Further, a persistent decrease or increase in the output of gold from the mines, which results in a contraction or expansion of the central reserve, will result also after some little delay in a proportionate contraction or expansion in the volume of the cheque currency. These two sources of change—the secular alteration in the multiple and the automatic multiplication of changes in the supply of gold—are important causes of variation in the supply of the cheque currency; but for present purposes they may be neglected, for they cannot be eliminated or even greatly modified by any change in the loan policy of the banks. It remains true, however, that in order to meet temporary changes the banks' multiple *can* be varied; that is to say, that the supply of cheque currency is elastic and is consequently capable of being adapted to changes in Demand. Before considering the loan policy of the banks, *i.e.* the manner in which they actually do vary this multiple, we have to ascertain at what points the power to vary the volume of the currency is lodged.

Some measure of control over the supplies of purchasing power is exercised by the public. If their money work grows in volume they can increase the efficiency of the currency by working their accounts more intensively; and, no doubt, when the outlook is good, business men actively employ that part of their money stock which in normal times they hold as a reserve against contingencies, and so increase the quantity of currency in active circulation. At such times, too, they can, if they choose, increase their power to draw cheques by transferring money from deposit to current account; and they are likely to increase the volume of purchasing power by an extension of book credits. Promoters of new issues may even arrange for an importation of gold in order that bank loans may automatically increase and so make it more easy for them to float some new loan or joint-stock company. Conversely, the public may, when their circumstances require it, withdraw legal tender from the banks' reserves and consequently cause a contraction of the cheque currency into which those reserves are multiplied. The public can, therefore, exercise an appreciable measure of control over the volume of purchasing power; they may increase or diminish it in a way which is largely independent of the banks; and when they do so, they may initiate or reinforce a change in the value of the sovereign which increases the difficulties with which the banks are faced in carrying out any policy designed to maintain that value at a constant level.

It seems safe to assume, however, that the ability of the banks to vary the volume of their loans gives them sufficient power over the volume of the cheque currency to enable them to counteract minor disturbances due to the action of the public, and to effect a deliberate adaptation of supply to many of the changes in the volume of money work to be done. Each of the Joint-Stock banks in the system has the power to vary its multiple, and indeed it tends to do so when considerations of what is safe are modified by changes in the financial outlook which arise in the course of a business cycle. But, apart from such changes, its normal policy is to maintain its issues of cheque currency in a fixed and definite relation to its reserve, and to pass on to the Bank of England the task of regulating the volume of currency in accordance with the social interest.

There are two good reasons why this duty should be lodged with the central bank of the system. In order to illustrate the first reason, let us suppose that a seasonal increase in the volume of payments has set up a demand for increased supplies of cheque currency, and let us contrast the manner in which this demand could be met, on the one hand, by the Joint-Stock banks singly or in unison, and, on the other, by the central bank of the system. If one of the Joint-Stock banks were to expand its loans to meet a demand of this kind, no doubt some part of the cheques drawn against these loans would reappear as an increase in its own lodgments; but naturally much the greater part would go to increase the lodgments of other banks in the system. The cheques paid into those other banks would be presented by them for payment through the Clearing House, and would require the bank whose loans had been increased to deplete heavily the balance at the Bank of England, which formed the most important part of its reserve. The net effect of the operation, therefore, would be that the lending bank would obtain a slight increase in its lodgments and would suffer a heavy reduction in its reserve, so that the multiple connecting the two would be altered unfavourably and in opposition to its normal policy of maintaining this multiple as a constant. Let us now suppose that *all* the Joint-Stock banks expanded their loans slightly to meet this temporary increase of demand. In such circumstances practically the whole of the cheques drawn would reappear as an increase in their aggregate lodgments, and their aggregate reserves at the Bank of England would remain unaffected. The net effect in this case, therefore, would be that the total lodgments of the banks would be increased, their total reserves would remain constant and the average proportion between the two would be affected in a slightly unfavourable way. But there would be no assurance that the change in the proportion would be the same for each bank; in some the change might be large, in others it might be small. Even, therefore, if the Joint-Stock banks could agree to act in unison to meet this increase of demand, their policy would involve a considerable practical difficulty. This difficulty disappears when the central bank of the system undertakes to expand its loans to provide the additional currency which is required; for the Joint-Stock banks keep their balances at the Bank of England, and consequently any increase in the loans of the Bank reappears as an increase in its own lodgments. The only difficulty experienced by the central bank in meeting a temporary increase of demand of this character lies in the fact that an expansion of its loans involves a slight, but only a slight, unfavourable change in the proportion between its reserves and its lodgments. And this disadvantage soon disappears, for the Bank charges for its increased loans a rate of interest sufficiently high to ensure that they are repaid as soon as the pressure of demand declines to normal proportions.

The central institution of a banking system is then in a peculiarly favourable position to regulate the volume of the currency, and a centralized system consequently carries with it the great advantage of a highly elastic supply. How important this advantage is may be seen by substituting for the seasonal demand which has hitherto been assumed the intense demand for additional currency which arises during a period of crisis. During the American crises of the past this demand could not be met, for none of the many thousands of independent banks could safely expand its loans to provide business men with the currency they urgently needed to meet their obligations, and collective action could not be very effectively organized during the rapid growth of the emergency; consequently the unwillingness or inability of the banks to provide the public with the means of meeting their engagements increased the general apprehension and emphasized the severity of the crises.

On the other hand, during recent periods of general apprehension in England, the banking system, acting in harmony, has refrained from any general contraction of loans, while the Bank of England has undertaken to expand its issues of currency in response to the urgent public need. By such action public apprehension has been allayed and its development into a crisis prevented.

In view of the ease and safety with which the central bank of a system can expand and contract its loans it is natural that the duty of regulating the volume of the currency should be entrusted mainly to the Bank of England. The Joint-Stock banks can and do meet local variations in the volume of money work by transferring currency from one point to another in response to the seasonal needs of trade and industry, and in 1920 they are adopting a common policy of restricting the growth of their loans; but, generally speaking, they do not undertake the deliberate regulation of the total volume of supply; this task, for the reasons given, they shift to the Bank of England.

This, however, is not the only reason why the duty of regulation is passed on to the Bank of England; a second reason arises from the extreme difficulty of ascertaining at any time the volume of currency which is really needed.

The true social need for currency at any time is in theory perfectly definite; it is that amount which enables the public to deal with the volume of their payments without disturbances of the price level. But this amount cannot be found by direct inquiry; it cannot, for example, be ascertained by the pressure of the public demand for bank loans, for this pressure is likely to increase at the very time when prices are rising in consequence of the currency being already in excess.

In order to make this point clear let us consider the nature of the demand for an extension of bank loans during a period of rising prices and growing activity of business. This demand arises from the need of business men for increased quantities of resources as a means of expanding their operations; these business men want to increase their capital in order to employ more labour, to increase their stock of raw materials and machinery, and possibly to increase that part of their capital which they hold as a stock of currency for effecting the increased volume of payments which accompanies the general expansion of activity. When, for example, a business man wishes to borrow £50,000 from his banker he may require to hold only £1000 of this as a money stock to carry through the increased volume of his transactions; in which case only one-fiftieth of his demand arises from the true social need for currency. In response to this demand the banks cannot, of course, increase the quantity of real resources in the country; all they can do is to increase the supply of money, the supply of control over these resources, or Command over Capital. If a banker expanded his loans to meet the particular demand for £50,000 which we are considering, he would be acting against the social interest in respect of £49,000 at least, for he would be merely inflating the currency by that amount and so reinforcing the rise of prices; and he would hardly be acting in the social interest in respect of the £1000, for, although by lending this amount he would be meeting a real need for the means of effecting payments, he would at the same time be enabling the business community to maintain prices at the current level, which was already too high.

The point to notice, therefore, is that the true social need for currency is expressed as a part of the demand for a control over resources in general; it is not separately expressed in its own market, and its amount, consequently, cannot be found by direct inquiry in any market, or measured by the general demand for loans. Accordingly the supply of currency cannot be regulated by approximation to any known figure; it must be regulated rather by correcting maladjustments after the event, in accordance with the signs of scarcity or excess, and by anticipating, with appropriate action, prospective sources of disturbance. These signs and portents are found in the movements of prices, the state of the foreign exchanges, the present and prospective strain upon the central gold reserve and many other of the vague indications which in their aggregate constitute the general financial outlook.

It is clear that the Bank of England is in a far better position than the Joint-Stock banks to deal with a problem of this complexity. It is in close contact with the international gold market; it holds the central gold reserve; it knows the bankers' balances and the prospective movement of State funds; moreover, its constitution is not representative of purely banking interests.

This, then, is the second reason for the transfer of control to the Bank of England: that by virtue of its great prestige, of its recognition of the social interests entrusted to it and of its intimate contact with the many obscure influences which are constantly tending to set up changes in the value of the sovereign, the Bank is in a peculiarly favourable position to assume the responsibility for the regulation of the currency.

We reach so far the following conclusions. The total volume of purchasing power exercised by the public includes a large and very important part consisting of the cheque currency. The volume of this currency may be regarded as a multiple of the central stock of gold held by the Bank of England. Both the public and the Joint-Stock banks have some power to vary the volume of the currency. But this power is not likely to be exercised in close conformity with the social interest; for the public's action in this respect is largely irresponsible, while the policy of the Joint-Stock banks in normal times is to maintain a certain definite proportion between their lodgments and their reserves; further, as the cheque currency is based on credit, there is a natural tendency for the power exercised by the public and the Joint-Stock banks to be influenced by changes in the general level of confidence, with the effect of causing variations of Supply which have no close relation to Demand. With these limitations, however, the greater part of the control over the currency is passed on to the central bank of the system, the Bank of England, together with the duty of deliberately regulating its supply in accordance with the social need. We have now to consider the machinery by means of which it discharges this duty.

CHAPTER XXV

THE MACHINERY OF REGULATION

THE first point to consider in connexion with the machinery of regulation is the relation between the social interest, which lies in a greater stability in the value of the sovereign, and the practical policy of the Bank of England, which consists in maintaining its gold reserve at a certain necessary level.

Causes tending to vary the purchasing power of the sovereign may originate at home or abroad. A fall in the home demand for currency due to a decline in the volume of transactions, or an increase of purchasing power in the hands of the public due to an expansion of credit, both tend to cause a fall in the home value of the sovereign, to encourage the export of gold and consequently to reduce the size of the central reserve. Similarly, a temporary collapse of credit in a foreign country tends to make gold relatively dear abroad, to encourage its export from this country, to reduce the central reserve and consequently to cause a contraction of the cheque currency and a marked rise in the home value of the sovereign; conversely, influences of an opposite kind tend to increase the central reserve of this country and, by leading to an expansion of the cheque currency, cause a fall in the home value of the sovereign. But all these causes, tending to disturb the purchasing power of the sovereign, whether originating at home or abroad, and whether working in one direction or the other, all express themselves in a tendency to vary the size of the central gold reserve. When, therefore, the Bank of England is carrying out its practical policy of maintaining its reserve at a certain necessary level, and is taking action against the causes which tend to disturb this level, it is also taking action against the causes which tend to disturb the home value of the sovereign. Its practical policy, therefore, is harmonious with the social interest, and we may express its operations indifferently in terms of high theory or market practice.

To put the matter in a slightly different way: the Bank of England is the agency through which the banking system establishes contact with the international gold market; it constitutes, as it were, the channel connecting the external stock of gold in the world market with the internal stock which is multiplied for home use into a larger volume of credit currency. The object of the Bank, expressed in practical terms, is to take action against temporary causes which are constantly setting up an ebb and flow between these two stocks and so disturbing the level of the central reserve; its object expressed in terms of the social interest is to react against the influences tending to disturb the value of the sovereign.

An association of producers formed to moderate the price fluctuations of the commodity in which they dealt would endeavour to carry out their policy either by directly regulating supply in accordance with changes in demand, or by varying the price at which they would from time to time be prepared to sell their product. The powers at the disposal of the Bank of England for the purpose of moderating fluctuations in the value of the sovereign are strictly analogous; they are exercised partly by varying the supply of currency in response to changes of demand, partly by varying the rate at which this currency is from time to time supplied. The sole difference between the two cases lies in the fact that commodities are supplied to the public by way of sale, while currency is supplied to the public by way of loan.

The first method has already been discussed; apart from the 1920 policy of collective control its successful use depends on the existence of a central bank and an elastic currency, both of which conditions are found in England. The Bank is able easily and quickly to increase the volume of its loans and consequently the volume of the cheque currency. It can, therefore, readily meet temporary expansions in the home demand which, apart from the action, would cause a rise in the purchasing power of the sovereign, and so initiate an import of gold.

The second, and much the most important, method by which the Bank controls the movement of gold has also been discussed: it lies in the practice of varying the Bank rate. Such action becomes effective, it was noticed, through its influence on the Market rate; for a rise in the Market rate has two consequences, the one immediate, the other more remote, but each operating in the same direction. Its immediate effect is to make it more profitable than before to have funds in London, so that an outflow of gold is checked and an inflow of gold encouraged. Its more remote effect, that is to say, the ultimate effect of a persistently high Market rate, is to contract the volume of bank loans and consequently of the currency, to raise the internal value of the sovereign and so to draw in gold from abroad. By the employment of this second method, therefore, the Bank is enabled to meet temporary changes of pressure on its reserve, due to causes originating at home and more especially abroad, and by so doing to mitigate changes in the internal value of the sovereign which would result from any marked expansion or contraction of the home stock of gold. The point to notice at the moment is that the power of the Bank to take effective action of this kind depends on its ability to influence the rates of the great Joint-Stock banks by whom the greater part of the supply is controlled. Apart from collective action, a rise in the rates charged by the central bank works out its effects through several routes. By discouraging borrowing from the Bank itself, it tends to reduce the totals of Other Securities and Other Deposits, thereby initiating a rise in Market rates, directly through the contraction of loans, and indirectly through the contraction of the deposits which form the principal reserves of the Joint-Stock banks. It leads also to a partial rise in the rates at which capital is supplied throughout the whole country; for a large and perhaps a growing part of the loans of the Joint-Stock banks are made at rates of interest which vary automatically with changes in the Official rate. Finally, each change in the Official rate is customarily followed by a meeting of the Clearing House bankers, and leads usually, though not always, to a rise in the rates allowed by them to the public for money lodged on deposit account. It seems to be true that a rise in Bank rate will always become effective if time is given for these various influences to work out their full results. But the Bank controls only a relatively small part of the total supplies in the short loan market; and the fact that it has at times to reinforce the influence of a rise in its rate by borrowing from the market shows that the Bank rate is inadequate as an effective means of dealing *immediately* with temporary disturbances. The lack of any close connexion between Bank and Market rates marks, then, a definite weakness in the power of the Bank of England to carry out the duties with which it is entrusted.

It must be noticed, too, that the powers of the Bank to alleviate changes in the internal value of the sovereign are weakened by other causes. In the first place, the control exercised by the public and the Joint-Stock banks over the volume of the currency enables them to initiate or reinforce changes in the purchasing power of the sovereign which add materially to the difficulties which the Bank is called upon to face. In the second place, the very small size of the Bank's gold reserve in relation to its very large international liabilities is itself a source of weakness, for it requires the Bank to react against disturbing causes more frequently and more violently than would otherwise be necessary. A substantial increase in the central gold reserve would make it possible to absorb many of the temporary strains set up at home or abroad, would make possible a more moderate employment of the machinery of the Bank rate and so would relieve the Money Market of many of the incessant minor disturbances to which it is in such circumstances exposed.

We have then the following conclusions with regard to the machinery of regulation. Variations in the purchasing power of the sovereign are of such great social importance that an active policy of regulation is necessary in the social interest. Effective action of this kind is most conveniently taken by exercising deliberate control over the volume of the cheque currency. This control is lodged partly with the public and the Joint-Stock banks, but mainly with the Bank of England. The Bank, employing its power of regulating the volume of the currency in conjunction with its power of varying the market rate of discount, modifies the "natural" ebb and flow of gold between the internal and external stocks of the metal, thereby modifying also variations in the internal value of the sovereign. Its powers to carry out its duty in this respect smoothly and effectively are, however, weakened partly by the influence of the public and the Joint-Stock banks on the volume of the currency, partly by its imperfect control of market rates and partly by the relatively small size of its gold reserve. This brief consideration of the powers exercised by the Bank of England leads to the more difficult question of the causes of the more important changes in the value of the sovereign, the ability of the banks to detect these causes and their power to modify their operation or their effects.

CHAPTER XXVI

THE REGULATION OF THE CURRENCY

BEFORE proceeding with the discussion of the particular questions laid down at the close of the last chapter, something of a more general character should be said with regard to the alternative methods by which paper currencies are regulated.

We may begin with the fact that every note passed into circulation constitutes a loan free of interest raised from the public. It follows that those who supply these notes can obtain exceptional profits on their operations (cf. pp. 147–8) and are consequently exposed to a strong temptation to issue them in excess. If this tendency works unchecked, it may impair public confidence in the note issue; in any case, it will drive down the value of the unit of currency and so cause an upward fluctuation of prices which disturbs the conduct of home business and the course of foreign trade. In view of this disparity between private and social interest, it is only to be expected that Governments, where they do not themselves undertake the work, should impose restrictions on those to whom they grant the right of issue. Their object in so doing is to protect the purchasing power of the unit of currency; partly by maintaining the general acceptability of the note issue, but mainly by providing that its volume shall expand and contract, not in accordance with the impulse of private interest, but in response to the social need for the means of payment. The principal method which they adopt to attain these ends is that of requiring banks of issue to hold a certain minimum reserve; for if these promises to pay are always immediately convertible into gold, holders of notes are ensured against loss and at least a partial protection is obtained against over-issue.

The Bank Act of 1844 partly effected these objects. The requirement that the Bank should hold a reserve of 100 per cent in gold against all notes issued beyond a certain defined minimum ensured the general acceptability of the note and effectively removed any temptation to over-issue; but it also removed from the Bank any power to manufacture additional notes in response to temporary increases in the demand for money. That rigid restriction has, however, been a little modified by the Currency and Bank Notes Act, 1914, which allows the Bank, with the consent of the Treasury, to issue notes temporarily in excess of the legal limit. The various reserve requirements imposed on the Reichsbank prior to the war effectively ensured note-holders against loss, and so maintained the acceptability of the issue. The diversion of a part of the bank's profits to the State, together with the provision for a minimum gold reserve, removed the tendency to over-issue and partially secured the immediate convertibility of the note. At the same time special provision was made to enable the volume of the note issue to expand in response to temporary social needs.

The recent reorganization of the banking system of the United States granted to the Federal Reserve Board the power of suspending the legal reserve requirements imposed on the banks within the Federal Reserve system, as circumstances make it desirable to do so. It marks, therefore, a partial transition from the condition in which Government defines in advance the limits within which the right of issue may be exercised, to one in which Government entrusts some expert body, conscious of the social interests involved, with full powers to regulate the supply of currency in response to changing conditions as they arise. Where the technique of banking is highly developed and the interests of the community are fully recognized, this latter policy is clearly the more flexible and effective method of regulation. It is successfully adopted in France where the central bank, a semi-state institution with a conservative policy, has practically a free hand in controlling the volume of its issues. So too in this country, where the public responsibility assumed by the Bank of England, together with the great strength and high traditions of the English Joint-Stock banks, has made it possible for the State to entrust the banking system, without restriction of any kind, with the control of the deposit currency. It is with the manner in which the English banks exercise these powers that we are now concerned.

In approaching the question of the principal sources of variation in the value of the sovereign and the manner in which the banks employ their control over the cheque currency to modify these variations, we may first of all notice and set aside an important source of change which it is beyond their power to remove.

This cause, originating in the external gold market, has already been noticed; it lies in a persistent change in the profitableness of gold-mining. When at the close of the last century the output of gold showed a marked and continuous increase, the new supplies of the metal, like those of any other commodity, distributed themselves among their various uses throughout the world at a continually declining value. Clearly the Bank could not check, and ought not to attempt to check, a corresponding decline in the home value of the sovereign. It was both necessary and desirable that a part of the new supply should permanently increase the central gold reserve and should be multiplied by the banking system into a volume of currency which would enable the general price level in this country to move upwards in correspondence with the general rise of prices throughout the world. Some of the effects of a persistent change of this kind may be alleviated by a judicious policy on the part of the banks; but to remove the cause would require more drastic action, such as the abandonment of the gold standard and the adoption of another standard specially selected or devised with the object of providing a unit more stable in value.

Setting aside this source of disturbance as being in the main outside the scope of the present argument, we may turn to consider those causes against which the banks can operate effectively: namely, the more temporary influences originating either abroad or at home.

There is no need to consider at any length those causes which originate abroad, for the manner in which they operate and the manner in which they are met by the Bank of England have already been indicated; but this is the appropriate place to deal with them, and something further may be said in spite of the repetition which is inevitably involved by so doing.

The home value of every commodity is subject to disturbance from causes originating abroad: fluctuations in the foreign demand, speculative cornering of stocks, tariff changes and many other influences are constantly altering the comparative level of internal and external prices, and so encouraging an inflow or outflow of the commodity affected. Further, when the change is due to such a cause as destructive dumping, the business disturbance which is set up by the temporary fall of price in this country gives rise to a demand for the deliberate regulation of importation. The social need which this demand expresses is evidently identical in nature with that which requires the Bank of England to react against temporary causes setting up a to and fro movement of gold.

The home value of gold is subject to commercial causes of disturbances similar in kind to those affecting other commodities, but these causes are more various and are added to by others arising from the monetary uses of the metal. Gold, as a commodity, has a market extending over the entire world; being known and in demand in every country, it is subject to an immense variety of causes affecting its value, and being highly portable it tends to move rapidly from one point to another in response to these changes. But over and above these sources of disturbance are those arising from its use as money. Gold enters into and is the duplicate of almost all transactions throughout the civilized world; it is the unit in which almost all contracts are expressed, and consequently the unit by means of which these contracts may unfailingly be discharged. Accordingly any change in the volume of trade between one country and another is liable to set up a demand for gold for purposes of settlement and consequently to initiate a temporary change in its value. Further, the fact that most countries multiply a stock of the metal into credit currency for home use introduces additional sources of disturbances, for it exposes the value of the metal to changes arising from any local expansion or collapse of credit. It is evident, therefore, that the internal value of the sovereign is exposed to a vast number and variety of temporary external causes of disturbance; there are the commercial influences, such as annual changes in the Indian demand for hoards or in the foreign demand for the use of gold in the Arts; there are the influences arising from good and bad harvests and other causes of changes in the volume of trade which set up a demand for gold for the settlement of international balances; and finally there are the influences originating in such conditions as a collapse of credit in a South American State or in the transition of a foreign country to a gold standard. All these influences exert their pressure with especial intensity on the reserve of the Bank of England, partly because England is the seat of a vast international trade, partly because she is the financial centre of the world and partly because London is in normal times the one great, free market for gold.

Each of these temporary influences, if it operated unchecked, would be likely to cause a marked expansion or contraction of the Bank's reserve of gold and, being multiplied by the banking system, would introduce a corresponding change in the home value of the sovereign with its accompanying social disturbances. In fact, however, it is not allowed to act unchecked, for the Bank reacts against it by means of variations in its discount rate designed to maintain its reserve at the level which it considers at the same time economical and safe. As already noticed, however, the fact that the Bank's reserve is unduly small and that its control over the market rate is imperfect causes the London Money Market and the main Produce Markets to be subjected to incessant minor disturbances which increase the business risks of their members and require the community to pay them for their services a higher price than would otherwise be necessary.

The remaining causes which we have to consider are those riginating at home in temporary fluctuations in the volume of money work and in changes in the level of credit.

It is well known that the volume of payments, or the demand for money, may vary widely at different times in the year. This kind of variation is most clearly marked in Germany. "The craze displayed after 1870 for uniformity did harm in abolishing the multitudinous dates for the payment of rent and interest and in ubstituting quarter day as the date of all payments of coupons, alaries, mortgages, etc. . . . Consequently on quarter days untold millions in bank-notes and ready money for redeemed and newly raised mortgages, rents and other payments wander from hand to hand, only to return after a few days, in a roundabout way, to the same places where they have been made liquid (available)." [47] In order to meet this temporary pressure greater elasticity was given to the Reichsbank's note issue in 1910 when the "tax free contingent" of £27½ m. was increased at the end of each quarter by £10 m.

In France where over one-third of the population earn their living on farms it is only to be expected that there would be a heavy seasonal fluctuation in the demand for currency. The effects of the increased volume of payments to be carried through in the autumn are emphasized by the practice on the part of a large number of farmers of retaining a great part of their autumnal receipts in their own hands rather than depositing them with their bankers. In consequence of this there is a heavy pressure on the part of the public to discount bills and meet the deficit in the supply of currency. The Sociétés de Crédit cannot meet this pressure because of the decline in their deposits; indeed, the total of their bills discounted is often at a minimum in the winter months. Accordingly the demand is passed on to the Bank of France, whose portfolio shows a marked seasonal fluctuation, rising at the end of the year to a figure some £35 m. above its minimum point.[48]

The seasonal changes in the demand for currency in England have been described by Mr. Withers and many other writers; they are matters of common knowledge. The demand by the Government to pay its dividends, by householders to make quarterly rent payments, by business people to show a good balance-sheet at the end of March and December (the dates to which most of their accounts are made up) and by the general public when making holiday or buying Christmas presents; all these temporary changes of demand fall on the Bank of England and are met partly by withdrawals of cash, but mainly by a simple expansion of the cheque currency. "By means of this system, emergency currency and credit are provided with extraordinary ease. It has grown automatically, commands complete confidence, and works with a perfection that no theoretically planned scheme can rival. If the supply of money runs short, borrowers come to the Bank of England with securities of the kind it approves, and in the course of a few minutes' conversation with the principal of the discount office add a million or two to the basis of credit as expeditiously and easily as the ordinary citizen can buy a pair of gloves. The machine is a miracle of ease and efficiency." [49] The volume of cheque currency readily expanded in this way is as readily contracted when the need for it has passed, for the Bank charges a sufficiently high rate for additional supplies to ensure their early repayment when the pressure has declined to a normal level. It seems clear, therefore, that the loan policy of the English banks is admirably adapted to meet these temporary expansions in the demand for currency and that no appreciable disturbance results from their occurrence. It must not be overlooked, however, that they are in themselves causes tending to raise the purchasing power of the sovereign, and that if not met they would initiate an importation of gold and an increase of the central reserve which would be at least unnecessary and possibly a cause of further disturbance.

It has been noticed that it is the normal policy of the Joint-Stock banks to maintain a certain definite proportion between their lodgments and their reserves. This policy is quite in harmony with the social interest when it is a question of meeting periodical expansions in the demand for money of the kind just described; for if the additional supplies are not issued by the Joint-Stock banks they are obtained readily enough from the Bank of England. But, in the converse case, when demand falls temporarily below the normal level, this policy appears to be less well adapted to the general interest and even to be in conflict with it. For the volume of currency issued by the Bank of England is so small a proportion of the whole that in times when business is temporarily slack the Bank cannot by a simple contraction of its loans easily reduce the volume of currency to the level required by the social need. At such times, therefore, the continuance by the Joint-Stock banks of their normal policy leads to their maintaining a volume of lodgments in excess of the public requirements; the currency is inflated not by an increase of supply, but by a fall of demand; and it inevitably follows that loan rates in the London market fall to a nominal level. These unduly low rates influence people at home by encouraging speculative activity on the Stock and Produce markets, and so giving a lift to prices; they influence people abroad, for foreign countries find it less profitable to lend here and more profitable to borrow; these two effects reinforce one another, with the result that the balance of indebtedness turns against England and gold tends to flow abroad. We may perhaps conclude, then, that the policy of the Joint-Stock banks is defective in so far as their policy of regulating their issues by maintaining a certain fixed multiple of their reserves prevents the volume of currency from contracting in response to a temporary fall of demand, and consequently increases the difficulties of the Bank of England in protecting the central gold reserve. In reaching this conclusion we have arrived by a different route at the view expressed by Mr. Hartley Withers in his book on *The Meaning of Money.* In his chapter on Bank Rate and Market Rate, Mr. Withers points out the evils resulting from the grant of loans at nominal rates, and suggests that in such circumstances the banks should agree upon a common policy which should define the minimum rates at which they would lend, and would consequently reduce the total volume of their loans.

The Joint-Stock banks are managed by business men who administer the resources at their disposal on ordinary business principles. There are practical reasons which tend to prevent any one bank from contracting its multiple during periods of temporary business slackness, for each naturally endeavours within the limits of safety to maximize its individual profit, and it would not do so by a contraction of its loans unaccompanied by a corresponding contraction on the part of the other banks. There are, similarly, practical reasons which tend to make each bank increase its multiple during the more prolonged periods we have now to consider: the periods of rising confidence which accompany, and indeed cause, an expansion of credit. It would be unreasonable to expect that a practical policy designed to maximize individual profits should in all circumstances lead the Joint-Stock banks to act in perfect harmony with the social interest and, indeed, in the circumstances which we are considering it may be argued that it leads the banks to act in a manner which increases the difficulties of the Bank of England in protecting the interests of society as a whole.

Let us assume, without inquiring into the cause, an improvement in the business outlook which results in a rise in the general level of confidence throughout the business community; and let us endeavour to trace, first, the manner in which this change is magnified in its transmission through the monetary system, and, secondly, the manner in which the banks might employ their control over the cheque currency to react against its injurious social effects.

The active principle determining the development of a business cycle seems to lie in the inherent instability of business confidence; in its tendency to rise or fall *cumulatively*; in the fact that it has a "normal level" only in the sense that during the transition from moderate depression to moderate exhilaration the level of confidence is neither abnormally high nor abnormally low. This principle is not an ultimate cause; it originates partly in the nature of the industrial organization, partly in the nature of the monetary system. The organization of the typical producing group, which causes the entrepreneur to obtain a bounty from rising prices; the length of the interval between the initiation of the production process and the delivery of the finished goods, which causes output to depend not on facts but on forecasts; the imperfect knowledge on the part of each producer of the activity of his rivals, which increases the uncertainty of these forecasts; the period of time required for the construction and wearing out of capital goods, which hampers the rapid adjustment of the appliances of production to the demand for their products; the close interrelation, financial and commercial, of all kinds of business activity—all these industrial conditions cause changes in business confidence to be cumulative; and they are reinforced by accompanying changes in the volume of purchasing power.

Let us, then, suppose that, in a period of general depression, there occurs a change which improves the business outlook in some particular trade, and so causes business men in that trade to be more confident that any goods they may now begin to produce will be marketable at more profitable prices. Whether or no this confidence is justified, the increased activity in the trade concerned will be a real cause of increased confidence on the part of many other producers. For this increased activity will be propagated backwards, forwards and sideways; it will increase the prospects of profitable sales for producers of its raw materials, for the transport and merchanting agencies which deal with its materials, and for the trades which supply the goods on which the larger earnings of its workpeople will be expended. Each trade so affected will, in its turn, pass on and return the impulse. In this way rising prosperity and growing confidence in each trade is a cause of rising prosperity and growing confidence in all others; the influence is mutual and cumulative. The constructional trades, together with the producers of coal and iron, become exceptionally busy; business activity increases generally, and productivity expands.

This cumulative activity is reinforced by its effects on the monetary system. Increasing confidence inevitably encourages business men to extend the investment of resources in their undertakings in order to take advantage of the more favourable business opportunities open to them. It is likely, therefore, that they will bring into active circulation that part of their money stock which they normally hold as a reserve against contingencies; investors, by releasing their accumulations, will further increase the quantity of money in active circulation; merchants and speculators will buy goods for future delivery with bills of exchange or mere promises to pay, as they did with such powerful effects in 1919. Individual action of this kind results in the creation of an increased quantity of purchasing power which, being employed to hire more labour and to obtain more raw materials and finished goods initiates (or emphasizes) a rise of prices.

But rising prices, in the existing organization of society, grant a bounty to the employer, and consequently reinforce the rising level of confidence, and urge business men to obtain more capital in order to expand still further the scope of their activities. Capitalists encouraged by the growing prosperity of trade and industry, are more willing than usual to lend; business men are more urgent than usual in their demands for resources. Capital flows readily into the hands of the company promoter to expand joint-stock enterprise of all descriptions, and there sets in a heavy pressure on the Joint-Stock banks for an extension of their loans.

It would be an extraordinary thing if the banks alone, among business men, were unaffected by the general spirit of confidence, and if they were not inclined to feel that a proportion between lodgments and reserves which was safe in ordinary conditions was not rather more than safe in a period of increasing prosperity. No doubt in the later stages of the upward movement there are symptoms of approaching difficulties which they will not disregard, and no doubt cautious bankers will throughout discriminate against dubious securities of the nature of finance bills. But in the earlier stages the Joint-Stock banks have every inducement to expand their loans: they must feel it safer than usual to do so; they can lend against good security at unusually profitable rates of interest; and they probably regard it as their duty to meet what they regard as the "legitimate demands" of business.

But the banks can lend only "Command over Capital"; they cannot increase the supply of food, raw materials, machinery and other real capital which is required. Every increase in their loans means an increase, not of real resources, but of control over these resources; it means a dilution of the currency, and involves a further fall in the purchasing power of the sovereign or, in other words, a further rise in the general level of prices and a yet further artificial stimulus to trade and industry. At such times, when the purchasing power of the community has already been increased by action on the part of the public, and rising confidence has been reinforced by rising prices, it seems probable that the true loan policy of the banks lies not in an expansion of their loans, but rather in a contraction designed to counteract the effects of increased purchasing power on the level of prices; or, if such drastic action is impracticable, it would seem to be a policy which enabled them to lend in support of "legitimate" business, but to lend only at rates so high as to take from business men the bounty conferred on them by rising prices.

Professor Irving Fisher has shown that the *money* rates of interest charged by the banks at such times are below the *real* rates; they are, therefore, much below the level at which they would destroy the bounty accruing to business men, for that bounty is derived in part from the working man as a result of the comparative fixity of wage rates. But the extent to which the English Joint-Stock banks actually expand their loans during such periods is a matter rather of inference than of statistical proof. The opinion of bankers, the evidence from foreign banking systems[50] and the strong *a priori* considerations which have been indicated all point to the conclusion, however, that their loans are considerably expanded during periods of increasing activity of business, and consequently that their policy, so far from counteracting the social disturbances due to a rising level of confidence, emphasizes these effects and increases the difficulties to be dealt with by the Bank of England.

The rising prices, which are in a large measure the cause of the feverish activity of business, carry within them the cause of its cure; for the falling value of the sovereign in this country works more and more strongly to encourage the export of gold and a withdrawal of legal tender money to carry through the larger volume of wage and retail payments. But before this tendency has shown itself strongly in an internal or external pressure upon the banks' reserves, or, at any rate, before the Bank of England can react effectively against the rising prices by reducing the volume of the currency, the normal adjustments of trade and industry may have become seriously disturbed. The great ease with which large profits can be made during periods of rising prices leads almost inevitably to a reckless use of resources: many businesses, particularly those manufacturing durable plant, will have expanded their productive capacity and their output in response to a rise of demand which cannot be sustained; the public will have subscribed much capital, and undertaken to subscribe more, for the formation of new Joint-Stock companies, many of which will yield a profit only to the promoter; speculators will have driven the prices in many markets to extreme levels, and by carrying stocks with the aid of borrowed money and promises to pay will have weakened the power of the market to meet any decline of values. The principal financial aspects of this condition will be the great extension of mutual indebtedness and a level of prices abnormally high. When, in those circumstances, confidence is weakened, either by industrial or financial causes, and bankers begin to restrict their loans, prices cease to rise and confidence in the immediate business outlook inevitably declines further. Business men, following the lead of the bankers, endeavour to strengthen their position by increasing their stocks of money; the pressure to sell increases, while the pressure to buy falls off; prices fall and confidence declines more rapidly; there sets in a heavy demand on the banks for the additional supplies of money by means of which outstanding liabilities may be met—a demand which, if unsatisfied, may become a panic demand and precipitate a crisis.

At such times of rapidly declining confidence, when the public need for currency as a reserve against contingencies and also perhaps to meet an increased volume of current transactions is exceptionally heavy and urgent, there is naturally a strong tendency on the part of each individual Joint-Stock bank to strengthen its position by contracting its loans, and by so doing to contract also the supply of cheque currency. It is now generally recognized, however, that if each individual bank endeavours to protect itself in this way, each is merely increasing the pressure falling on all; that at such times the banking system, being based on public confidence, is threatened as a whole; and that this confidence must be maintained by collective action. In recent periods of strain, therefore, joint action by the large banks has restrained the tendency of individual institutions to call in their loans and so decrease the volume of the currency. This action has been effective in so far as it has succeeded in preventing crises, but it has probably not been effective in inducing each individual bank to assume its fair share of responsibility. It has shifted on to the Bank of England the duty not only of meeting the additional currency needs, but also of meeting the deficit caused by contraction on the part of others.

The argument of this chapter is an attempt to examine the actual loan policy of the banking system based on an effective gold standard and to indicate any modifications which are desirable in the social interest; the conclusions to which it points are these. The ideal policy, it is assumed, is one by which the banks would react effectively against temporary causes tending to disturb the purchasing power of the sovereign. Those causes which arise from fluctuations in the external demand for gold are dealt with by variations in the Bank rate; but they are productive of minor disturbances in the Money Market which could be lessened if the Bank rate were more effective and the central reserve larger. Those causes which originate in such conditions as a seasonal expansion of the home demand for currency are met quickly and easily by the Bank of England; but those proceeding from a temporary decline of demand produce minor evils which could be reduced by collective action on the part of the Joint-Stock banks. By far the most serious causes are those associated with the expansion of purchasing power accompanying and reinforcing those changes in the level of confidence which are responsible for cyclical fluctuations. It would appear that the present policy of the Joint-Stock banks reinforces the upward movement of prices, but that it would be within their power, and very greatly to the social advantage, for them to employ their control over the cheque currency to react against the expansion of purchasing power and modify if not destroy the artificial stimulus which it gives to business activity.

It may be objected that, as Dr. Marshall states, "almost every recent wave of high or low commercial activity has spread, not very unevenly, over all countries in which large scale capitalistic production has prevailed,"[51] and consequently that the power of the banking system in any single country to moderate their intensity is rather more limited than has been assumed. This argument may show that a universal disturbance can be fully met only by universal action ; but it does not weaken the case for each country doing what it can to reduce the share of the general evil borne by itself. Past experience in this country shows clearly that banking policy can materially reduce the severity of business cycles, and post-war experience, so far as it is relevant, seems to confirm the effectiveness of individual action in the control of price levels.

It may further be objected that if the banks took stronger action to restrain the upward movement of prices during the earlier stages of a business cycle, they would retard the growth of business, the expansion of profits and the rapid development of the capital equipment of the country which occur during these periods. It is no doubt true that a partial removal of the artificial stimulus of rising prices would reduce the rate at which production expanded ; but it would also reduce the wasteful application of resources, the intensity of crises and the volume of unemployment which accompanies the subsequent period of depression. This objection may then be met. It does not affect the substance of the argument but it indicates the extreme complexity of the problem, and shows that the degree in which the loan policy of the banks might advantageously be modified depends on a valuation of all the good and evil involved in a trade cycle.

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CHAPTER XXVII

THE BANKING SYSTEM; CONCLUSIONS

ALTHOUGH the fundamental services of the English Joint-Stock banks are quite simple in character, their examination has given rise to a variety of special problems each one of which it has been necessary to discuss from its own appropriate point of view under penalty of losing touch with ordinary business language and ideas. In the course of these special discussions it has been difficult to preserve the unity of the main argument; hence it seems worth while, even at the cost of considerable repetition, to retrace the main lines of this argument in order to bring into closer relation with one another the main conclusions which have been reached.

The principal difficulty in understanding the operations of the English system seems to arise from the circumstance that the system is carrying out, at the same time and in intimate connexion with one another, two operations which are fundamentally distinct in character. The transfer of money and the manufacture of money—in other words, the Transport of Capital and the Supply of a Currency—are operations which are different in nature, are influenced in their development by different conditions and are to be judged by different standards. In these circumstances it seems impossible to form any clear conception of the work done by the system except by a separate examination of the two services it supplies.

The service of transporting capital (or more properly Command over Capital) is in essentials independent of the nature of the currency and could be quite well dealt with on the supposition that the money stock consisted only of gold pieces—could be dealt with, that is to say, without reference to the fact that the banking system also undertakes the manufacture of cheque currency. In view, however, of the fact that the use of a cheque currency contributes directly to the efficiency of the work of transporting capital by enabling the banks to transfer resources from point to point cheaply and rapidly, it has been more convenient to adhere to actual conditions, in which the cheque forms the principal means of payment. But in order to isolate the service of transporting capital it was necessary to eliminate that part of the banks' work which is concerned with variations in the volume of the cheque currency and in the volume of payments it is required to effect, and proceed on the assumption that the amount of cheque currency supplied was just that amount required to enable people to effect the current volume of payments at the normal level of prices.

That being assumed, the economies introduced by this part of the banks' work were measured by a simple standard: namely, the effect of their operations in increasing the earning capacity of capital. Their operations contain three economies.

In the first place, they increase the supply of capital by collecting lodgments from the public, partly in exchange for a rate of interest, partly in exchange for cheque-making facilities; secondly, by compounding these lodgments with their own capital and reserve funds, they convert a large number of small quantities and short lengths of capital, individually ineffective, into an aggregate available for productive employment; finally by a continuous redistribution of this capital among the points of highest yield they maximize its earning capacity.

The volume of their work and the efficiency with which it is discharged depend partly on external conditions, partly on the character of the banking system itself. The normal level of their lodgments is evidently determined by the size of that part of their resources which the public lodge with them on deposit account by way of a readily available investment and by that further part which they lodge on current account in exchange for cheque-making facilities. Such influences as an increase in the wealth of the people or an increase in the volume of payments effected by cheques tends, therefore, to increase the total volume of lodgments; while such influences as the development of stock exchange securities and other alternative methods of investing resources and providing reserves against contingencies tend to check the growth of lodgments. The principal influences due to the nature of the banking system are the scope of the branch bank organization, the centralized character of the system and, most important of all, the great reputation and strength of the individual banks. For on these considerations depend, first, the willingness of the public to entrust the banks with a large part of their resources; secondly, the fraction of this amount which must be held in the form of reserves, and hence, finally, the portion of these resources which the banks can make available for productive employment. In 1913 the banks owed the public some £840 m., and increased the productive efficiency of these resources by an amount in the neighbourhood of £20 m. a year.

We have summarized the economies resulting from the banks' work of transporting capital in the light of the fact that the money stock of the community consists mainly of cheque currency, and on the assumption that the amount of this currency was properly adjusted to the demand for it. Let us for a moment retain this assumption and add the further economy arising from the service performed by the banks in supplying cheque-making facilities in exchange for the use of resources lodged by the public on current account. It is impossible to evaluate this further economy in terms of money, but it is clear that the work done by the banks in substituting for alternative forms of money the extremely convenient cheque currency appreciably facilitates the economical dispatch of business, especially by its effects in enabling distant payments of large and irregular amounts to be made with ease and safety.

These economies being added together in this way, the aggregate constitutes the principal *normal* economies of the English banking system: that is to say, the economies yielded by the system in equilibrium—the economies which would appear if the more persistent influences governing banking operations were allowed to work out their full effects without interference. In this condition of equilibrium banking operations are very simple. The banks are middlemen; on the one hand, borrowing capital, either for an interest payment or for services rendered, and, on the other hand, carrying this capital into the hands of those who bid the highest net rate for its use. The public lodge with them Command over Capital, a control over a specific fraction of the productive resources of the community, and this fraction, plus their own resources and minus their reserves, governs absolutely the volume of their loans.

This simple picture is radically transformed, however, when we abandon the assumption made hitherto and take account of the influences which are constantly tending to disturb this equilibrium: namely, the changing demand for cheque currency and the fact that the banks have the power to vary the volume of this currency at will by varying the volume of their loans. The introduction of this new set of conditions requires us to judge the operations of the banking system by another quite different standard—the degree of success which the banks attain in so adjusting the volume of their loans as to approximate as closely as possible to the equilibrium which has been described.

In approaching this question we provisionally define the ideal to be attained as an adjustment in which the value of the unit of currency, the sovereign, is maintained at a constant level. The most effective method of attaining this ideal is, no doubt, the adoption of a tabular standard of value with machinery for maintaining the value of the unit of currency in conformity with it. If, however, so radical a change is practically unattainable, it is necessary to consider what other methods may be employed in existing conditions to attain the same end.

An alternative method is one by which the banks would deliberately employ their control over the cheque currency in order to adjust the total supply of purchasing power more closely to the volume of money work and so diminish the fluctuations in the purchasing power of the sovereign. This they already do; for the policy adopted by the Bank of England is perfectly harmonious with the attainment of this object. But it is suggested that they might do more: a more conservative loan policy during periods of growing business activity would diminish the severity of business cycles; a joint restriction of loans when money is unduly "cheap," owing to a transient decline in demand, would reduce the disturbances due to temporary inflation; while a larger central reserve and a closer connexion between Bank and Market rates would diminish price fluctuation in the Stock and Produce Exchanges and the risks of borrowers and lenders in the short loan market.

This second service of the banking system is then to be judged partly by the technical efficiency of the currency with which it supplies the public, partly by the manner in which it exercises its control over the volume of this currency in order to lessen the effect of influences tending to change the home value of the sovereign.

Granted, what appears to be true, that the banks are in effective competition with one another, there is evidently nothing in the nature of the work of transporting capital which necessarily involves the earning of abnormal profits. The same conclusion appears to be true with regard to the supply of a cheque currency; for the conditions of supply are such as to enable a fair bargain to be struck between the banker and his customer. But although it appears quite possible for those two services to be supplied at prices corresponding to costs of production, it seems, nevertheless, to be true that in actual conditions imperfect bargaining between banker and customer leads to their being supplied in part at prices which yield the banks a rate of profit rather above the necessary level.

It is not to be supposed for a moment that bankers administer separately, or even consider separately, the two services which they supply; they deal with the matter as a whole. If, therefore, theory is to follow and explain practice some attempt must be made to bring the influences affecting those two services into unity. They may be unified in terms of loan policy; for whether a bank is transferring resources or providing a currency, it is engaged in supplying Command over Capital.

With that aspect of the banks' loan policy which determines the manner in which a given quantity of resources is distributed among its various employments, we are not now closely concerned. The work calls, no doubt, for judgment, caution and an intimate knowledge both of the nature of the borrower and of the quality of the security he offers; but it raises no particular difficulty of theory. The policy is only a refined application of the general principle on which every business man distributes his capital among its various uses (pp. 30–1). Experience of what is safe and profitable is embodied in a policy of maintaining, normally, a certain definite fraction of total lodgments in each of various kinds of reserve. When, however, we turn to consider banking policy in relation to changes in the aggregate volume of loans, the matter becomes more complicated; for this volume is governed partly by the influences affecting the transfer of capital, partly by the influences affecting the supply of currency; and it is not always easy to disentangle and interpret their effects.

Neglecting the paid-up capital and reserves of the banks, there are two fundamental influences determining the amount of Command over Capital which they can supply. The first arises from the general conditions which determine the quantity of real resources which the public are prepared to transfer to the control of the banks. In England they so transfer, partly by way of a convenient investment, partly in exchange for cheque-making facilities, a control over about one-fifteenth of the total wealth of the country. The second influence is that governing the money value of these resources; the larger the total stock of gold and other legal tender money, the larger are the figures representing the resources transferred to borrowers. Changes in the wealth and habits of the people, and persistent changes in the annual supplies of gold, gradually change, therefore, the volume of bank loans. During the war, of course, an emergency banking policy and a great increase in legal tender money have greatly and rapidly altered the money value of the resources the banks control.

But while in the long run the volume of bank loans is determined mainly by the will of the public and the output of the mines, during shorter periods of time it is governed to an important extent by the will of the banks themselves During the upward course of a business cycle the banks expand their loans; they transfer to borrowers a control over resources greater than that lodged with them by the public. For, by creating Command over Capital, they lower the purchasing power of each unit of currency in the hands of the public and, in effect, make a forced levy on the community for the benefit of those who borrow from them. But with an effective gold standard this expansion of the currency, in so far as it is in excess of the money requirements of the community, can be maintained only temporarily. It ultimately leads to a drain upon the central reserve which compels a contraction of loans.

Transient fluctuations in the supply of Command over Capital are naturally expressed in the form of transient changes in that part of the banks' loans which are readily recoverable; they are concentrated mainly on the short-loan market. The volume of these loans is governed by the quantity of resources which the public choose to lodge with the banks, by the proportion of those resources which the banks find it advisable to lend for short periods, and by the incessant minor changes whose impact is absorbed by changes in the volume of short-loan money. These changes arise in part from such causes as the temporary " lock up " of funds due to payment of calls on new issues, and the desire of the banks to show large reserves in their half-yearly balance sheets. But they originate mainly in influences which affect the loan policy of the Bank of England, and consequently the basis on which the loans of the Joint-Stock banks rest. Such influences are variations in the financial outlook, in particular the movement of gold to and from the country; the seasonal expansion of the Bank's loans in response to increased demands for currency; the transfer of tax receipts to Public Deposits, and their release in payment of dividends. These influences have been overshadowed during the war by the policy governing the issue of Treasury notes. They are likely to be dominated for many years to come by the exigencies of public finance: by variations in the volume of State borrowing from the market and especially in the pressure of the State demands upon the Bank of England. These variations in the supply of Command over Capital cause fluctuations in prices and alternations in business activity which are closely similar in nature to those arising from the more persistent and general changes which have been discussed. But their influence is both temporary and local. They operate in a world which is, as it were, a model of the wider market, reduced in time and space.

CHAPTER XXVIII

THE MARKET FOR STOCK EXCHANGE SECURITIES

NEW SECURITIES

IT was noticed on pages 122–3 that the market for Stock Exchange securities is separable into two distinct but interdependent parts: the one, dealing with the marketing of new securities, facilitates the transfer of new capital from capitalists to entrepreneurs and other parties; the other, dealing with the marketing of old securities, facilitates the transfer within the group of capitalists of the titles to the capital outstanding in the hands of these entrepreneurs and other parties; together, the two parts lower the price at which capital is supplied to those who bid for its use. It is with the first part of this organization that we are now concerned.

This market is composed of the whole of the organization engaged in the creation and sale of new negotiable securities; using that term to include transferable titles to property such as shares and stocks, and transferable evidences of indebtedness such as debentures, bonds, and municipal and Treasury bills, but excluding the bills of exchange whose market is formed mainly by the banks and the bill-brokers.

In Germany the sale of these securities is undertaken mainly by the banks; in France it is dealt with to a considerable extent by the Haute Banque, the great Credit Societies and local bankers. In England, however, it is broadly true that only the better classes of securities are marketed by specialized institutions of this kind. Here the marketing organization is, as a whole, much less definite in form; it includes a wide range of agencies extending from the small group of firms of high reputation who specialize in this work, down to the innumerable little *ad hoc* promoting groups, in London and throughout the Provinces.

Foremost in this organization are the Issuing Houses proper, composed of highly reputable firms like Rothschild, Schroeder or Seligmann, whose main work lies in marketing such securities as those of foreign Governments and railways. It is, perhaps, possible to distinguish as a second and separate group a number of Trust and Finance Companies and of small firms sometimes described as Issuing

Houses, the distinction being made on the ground that they are permanently engaged in financial operations, and that, having a reputation to lose, they give the public some measure of assurance of the worth of their issues. Finally, comes that part of the organization by means of which the great bulk of joint-stock companies are floated: namely, the ephemeral promoting groups, usually specially formed for the purpose of selling a venture to the public, and dissolved when that purpose has been carried out.

These three groups may perhaps be regarded as forming the centre of the market organization; but work similar to theirs is undertaken by other parties. Municipalities may assume the responsibility of selling their own stocks either locally or on the London market; railways may act in a similar way; while joint-stock companies of all descriptions may themselves undertake to sell additional issues of their shares or debentures by offering them to their shareholders, by advertising them in the local press or by employing agents to place them among the public. American industrial securities used even to be hawked from door to door in this country, and a similar practice obtained a short while ago in Germany.

These are the parties who assume the responsibility for the work of issue; associated with them are others who specialize in some part of it. The more important of these are the underwriters, among whom are included many of the banks, the Trust and Finance Companies, Insurance companies and financiers of all descriptions; the brokers, who lend their names to the prospectuses, assign the underwriting on payment of an "overriding" commission, carry through many of the technical formalities and open up a market among their clients; the bankers who receive subscriptions from the public and issue securities in exchange; and the advertisement houses whose specialized machinery may enable them in some cases to distribute a million prospectuses in a day among a selected public,[52] together with the experts who draft an attractive prospectus and arrange for advertisement and notices in that part of the financial and general press which is appropriate to the particular issue.

Specialization is naturally carried further in London than elsewhere; but marketing organization more or less developed in character extends all over the country. Although indefinite in form, it is immensely powerful in action. Its principal device consists in expressing the demand for capital arising from public bodies and business undertakings in the form of a very large number of negotiable titles such as ordinary and preference shares and debenture stock, these securities being adapted both in amount and in the degree of risk concentrated upon them to the needs of all classes of investors (cf. p. 80). This device, together with the legal invention of limited liability and the work of the Stock Exchanges, enables the organization to collect annually from the public an immense number of small portions of capital, to add together innumerable short lengths and small quantities, and to place vast supplies at the disposal of States, Municipalities and business enterprises of all descriptions at home and abroad. M. Neymarck's [53] figures for the aggregate annual issues of the twenty-nine principal markets of the world show the volume of capital annually obtained by this means and the nature of the bodies to whom it was supplied.

Annual Issues (World)	£ m.
1904	576
1905	764
1906	1060
1907	612
1908	848

Total (five years), £3860 m. Annual Average, £772 m.

Issues 1907 and 1908 (World)

	1907. Per cent.	1908. Per cent.
Loans of States, Provinces, and Towns	35·89	34·17
Establishments of Credit	9·93	6·47
Railways and Industrials	52·72	57·80
Conversions	1·46	1·56
	100·0	100·0

This method of expressing demand in the form of negotiable securities gives the market peculiar facilities for supplying capital to foreign countries; for, with the growth of knowledge and confidence, the bonds of an American railway or of a European State can be sold in London almost as readily as home securities of a corresponding character. It is true that neither the German market nor, until recent years, the United States market, has done much work in financing foreign countries; but this is because their capital has been needed mainly for home development. The French and English markets, however, give ample evidence of the effect of the invention of the negotiable security in promoting the international mobility of capital. It is estimated that in 1908 [54] the total of French Valeurs Mobilières was very nearly £3000 m., of which some 10 per cent was held by foreigners; while French holdings of foreign securities amounted to about one-half of this figure. By means of the Valeur Mobilière, therefore, France had borrowed from abroad to the extent of some £300 m. and had lent to foreign countries no less than £1500 m. The English, or what is practically the same thing for this purpose, the London market is even more important as a source from which foreign countries draw their supplies of capital. In 1909 Sir George Paish made an estimate of the total foreign investments of the United Kingdom in 1907–8; this estimate is given in a compressed form below:—

	£ m.
Government Loans and Municipal Stocks	757
Railways	1199
Banks and Finance Companies	241
Canal, Docks, Electric Light and Power, Gas, Telegraphs and Telephones, Tramways, Waterworks	106
Mines	243
Breweries and Distilleries, Nitrate, Oil, Rubber, Tea, and Coffee	69
Commercial and Industrial, etc.	78
	£2693 m.[88]

It is not worth while to make any statistical comparison between the volume of capital supplied through the market for negotiable securities and the amount supplied through the banks and mortgage agencies, or between the volume of capital supplied to foreign countries by this market and that supplied by other parts of the market machinery. It is sufficiently evident from the figures already quoted and from common knowledge that the negotiable securities market is the most powerful single agency for collecting capital, and that it is much the most effective part of the market for dealing with the supply of capital to foreign countries.

There is, however, one further point of general interest: namely, the question of the comparative efficiency of the negotiable security as a means of supplying capital to different classes of borrowers. Is it as effective in drawing capital into ordinary business undertakings as into the hands of such public or semi-public bodies as States, municipalities and railways? This question of the suitability of the negotiable security as a means of meeting the home industrial demand for capital must be discussed in connexion with the machinery of the market (Chapter XXXIII, esp. pp. 218–9); at the moment it is sufficient to notice that more than two-thirds of our foreign investments consist of the securities of public bodies and railways.

The invention of the negotiable security and the rapid development of its markets during the nineteenth century have produced effects comparable in importance and similar in kind to those arising from the corresponding growth of railways and steamships. The development of more efficient means of transport has immensely increased the mobility of goods and consequently extended the range within which they can be marketed. By so doing it has made it more easy for individual factories and industries to settle in the districts of greatest natural advantage, thereby giving scope for increased specialization, international and national, and a great expansion in the scale of production of the individual factory or industry. The negotiable security has produced similar effects. It has increased the mobility of capital directly by making possible the collection into large aggregates of many thousands of small quantities of capital individually ineffective; and it has increased it indirectly by providing stock and share holders with a security which can be very readily charged in support of demands for loans from a banker or other party. In these two ways it has led to increased specialization in the functions of supplying capital and employing it; for, on the one hand, it has enabled the capitalist, who has no ability or inclination for management, to make a profitable investment of his resources, thereby increasing the quantity of capital coming forward; and, on the other hand, it has enabled business men without resources to obtain the capital they require, thereby increasing the quantity of managing ability available for production. In other words, it has enabled the community to specialize in the separate production of capital and business ability.

The effects of the market in increasing the available supply of business men and in enabling immense quantities of capital to be concentrated under a single control has naturally emphasized the influence of the general tendencies leading to large scale undertakings and enormously increased productivity. The full social effects of the negotiable security have yet to be disclosed. It is clear that its invention has greatly increased the financial power of the State and that, in conjunction with the joint-stock company form of organization, it has made possible the construction of immense productive works, the growth of powerful financial institutions, such as banks and Insurance companies, whose efficiency depends largely on their size and the undertaking of risky developmental work throughout the world. By means of the holding company and similar forms of organization it has often placed immense powers in the hands of business men, enabling them to obtain a partial monopoly in important branches of home production, to exercise concealed but extensive control over the industries of other countries,[56] and by further combination to extend their influence so far as to obtain a predominating influence over the world's supplies of important commodities. And yet, in opposition to its effects in facilitating concentration of control, the negotiable security is simultaneously facilitating a wide diffusion of the ownership of property. The ownership of State and municipal debts, railways and a vast number of undertakings of all descriptions, of a total value in 1908 of some £20,000 m.[57], is distributed in small portions among a multitude of holders throughout the world. The effects of this diffused ownership in consolidating the interests of nations and of individuals within each nation, and of lessening the social consequences of monopolistic control, have yet to be clearly seen.

CHAPTER XXIX

NEW SECURITIES; THE CHARACTERISTICS OF THE MARKET

WITH this brief review of the constitution and general features of the market, we now turn to consider more closely the nature of its work, the standard by which its efficiency is to be judged and the conditions on which that efficiency depends.

The discussion dealing with the banks and with Trade Credit is complicated by the fact that the operations of those parts of the market include not only the transport of capital but also the creation of purchasing power. That complication does not now arise. The market for new negotiable securities is as simple in its essential function as the railway which carries goods from points of plenty to points of most urgent demand. It lies between the group of capitalists in possession of available resources and the group of entrepreneurs and other parties in need of these resources; its function is to carry capital—or, rather, Command over Capital—from one group to the other; and the standard by which its work is to be judged is that of its efficiency in facilitating the movement of capital to the points of highest net yield.

This manner of expressing the standard in which the efficiency of a market agency may be judged is convenient enough in dealing with agencies whose work lies mainly on the side of Supply. But we need now to translate this standard into terms appropriate to a different point of view; for the work of this market lies mainly on the side of Demand (cf. pp. 103, 122). It is its business to formulate the social need for capital into an effective market demand, and by so doing to facilitate the flow of capital to the points of highest net yield. What are the essential conditions which must be satisfied if this ideal is to be attained?

The sources of demand for capital are of course very varied and numerous; they may be represented by promises issued by a State, a municipality, a railway or an ordinary business enterprise; or they may be represented by a share in the earnings of some undertaking; but whether they take the form of a promise to pay or of a share in profits, they represent prospective yield. It is the business of the market to select the sources of highest yield, to capitalize these in the form of stocks and shares and to sell these securities to the public. If this operation is to be carried out in accordance with the social interest, if it is to facilitate the movement of capital to the points of highest yield, it is clear that, subject to minor qualifications, two main conditions must be satisfied. In the first place, the source of earning power must be rightly formulated in order that it may exert its appropriate attractive power upon the available supply of capital; in more practical language, the property must be sold to the public at a price corresponding as nearly as possible to the capitalized value of its prospective net yield; it must be sold at its Investment Value (cf. p. 226). In the second place, the work of marketing securities must be carried out as economically as possible. These are the two main criteria by which the efficiency of this market may be judged.

Before passing on to consider how far in fact the marketing of securities is carried out in conformity with the social interest, we may touch in a preliminary way on the tendencies to diverge from this ideal which arise from peculiarities in the nature of the market, and on the methods by which these tendencies are checked. From a consideration of these peculiarities may be drawn certain general inferences whose truth can subsequently be tested by reference to actual marketing operations.

It can hardly be doubted that the dominating characteristic of the markets for negotiable securities—that which colours most of their incidents—lies in the fact that the value of the security, the commodity in which they deal, depends upon a set of present and future circumstances so complex that an accurate estimate can be made only in the light of expert knowledge. If, as in the wholesale markets for sugar or coffee,[58] buyers and sellers were usually equally expert, this peculiarity would perhaps have no great significance; but in fact this is not so, for those whose business it is to sell securities are often in direct contact with an unskilled investing and speculating public. Sellers have a more intimate knowledge of the commodity in which they deal than buyers, and this superior bargaining knowledge gives wide scope for deception. In the market for new securities this condition enables the company promoter to sell worthless securities to the public; in that for old securities, the Stock Exchange, it enables the speculator with inside knowledge to draw abnormal profits by dealing with investors less well informed than himself.

Further, it may be repeated that while the profits of a bank or a Trust company are directly dependent upon the wise application of the public capital which they control, the profits of the intermediaries in the securities market depend upon the difference between the price at which they buy from the vendors and the price at which they sell to the public; broadly speaking, their self-interest is bound up with the real earning power of the property they sell only in so far as they have a reputation to lose, only in so far as their reputation and therefore their power to make future profits is dependent on their honest dealing.

Finally, the opportunities for profitable deception are increased by the nature of the public, by the fact that advertisement, suggestion and more dubious methods may be effectively employed to excite the speculative tendencies of the investor and to encourage optimistic estimates which enable securities to be sold at prices far above the value of the property they represent. These conditions give little assurance that capital will flow into its most profitable uses; on the contrary, they inevitably give rise to strong tendencies for capital to flow into the pockets of promoters or to be dissipated in the heavy expenses necessary for effective deception.

This view of the market is, however, far too gloomy; for not only are the opportunities for deception limited by the nature of the securities sold, but they are also limited by devices of organization and of the law.

When a new issue consists of the stocks of a reputable State or the well-secured bonds of a sound American railway, public knowledge of the reputation of the borrower, or of the prospects of the undertaking, may be sufficient to yield a fair estimate of their true value; bargaining knowledge is fairly equal, and the marketing agency cannot obtain excessive profits at the expense of the public. It happens, too, that the natural safeguard accompanying the sale of these securities is supplemented by a further safeguard arising from the circumstance that their sale is frequently effected by first-class firms whose reputation and profit are dependent on fair dealings. In the multitude of securities of more dubious value where the safeguard of public knowledge does not exist, the protection of such middlemen is in general also lacking, so that the principal limitation to deception lies in the advisory organization of the market—the investment broker and the financial press—and in the legal enactments devised to secure the publication of essential particulars necessary to form a sound judgment of the securities in question.

These considerations with regard to the general characteristics of the market lead then to the following provisional conclusions: that owing to the very great complexity of the causes determining the value of the new security, it is very difficult and often impossible for any accurate estimate of its value to be formed by the public; that in the sale of high-class securities the difference of bargaining knowledge between buyer and seller is much less marked and the public are sometimes further protected by the high reputation of the middlemen ; but that in the more obscure kinds of securities the scope for deception is large, the tendency to deception little restricted by the organization of the market and the limitation of deception consequently dependent mainly upon the provisions of the law and the growth among the speculating and investing public of a firmer recognition of the realities of the situation.

CHAPTER XXX

NEW SECURITIES; THE SALE OF HIGH-CLASS SECURITIES

IT was suggested in the previous chapter that the efficiency of the market differed widely in dealing, on the one hand, with securities whose earning power could be estimated reasonably well by the public, and, on the other hand, with more obscure securities whose earning capacity was either unproved or unknown to the investor. There is no natural line of cleavage dividing securities into these two classes; they form a continuous series ranging from the stocks of a first-class State to the shares of a small company formed, perhaps, to exploit the doubtful possibilities of an invention or an undeveloped property abroad. Modes of thought and language are still inadequate to enable us to deal with such a series as a whole. Yet the distinction between securities of which the buyer has knowledge and securities of which he has substantially none is evidently one of great importance in considering whether the conditions of sale carry with them a reasonable likelihood of advantage to both parties. An attempt must be made, therefore, to separate the two, even though the line of division is necessarily of an arbitrary character.

But at this point arises the difficulty that the knowledge and judgment of investors vary as widely as the character of securities offered, that it would be absurd to postulate an investor whose bargaining knowledge might be regarded as representative. There is no need for concern as to the welfare of Insurance, Trust and Finance companies, the banks and other experts; they are not likely to suffer from imperfect bargaining knowledge. The parties of whose interests we need to take account are the outside public; and the investor of whom we speak must be conceived to be that part of the investing and speculating public who do in fact compose the market for the particular kind of security of which at the time we are speaking.

It seems reasonable to assume that the investor has fairly adequate bargaining knowledge when he enters the market to buy, let us say, the stocks issued by a Colonial Government, a reputable foreign State or a large municipality, or the debentures or preference shares offered by a railway of proved earning capacity For the purpose of the very general argument which follows it is not necessary to particularize further. Let us make an exceedingly rough division of the whole series of securities offered in the English market, placing on the one side stocks and shares of the kind just described, and on the other a large mass of less well-known securities whose main constituents are the stocks and shares of new joint-stock companies, formed under the Companies Acts ; and let us consider broadly how far the conditions of sale of these two groups of securities offer a reasonable protection to the public—how far they facilitate the flow of capital into its most profitable uses.

The following table shows the average amounts of the new securities of various kinds offered in the London market during the three years 1911–13 inclusive.

AVERAGE ANNUAL ISSUES ON THE LONDON MARKET FOR THE THREE YEARS 1911–13 INCLUSIVE (extracted from *The Economist*)

	£000.
British, Colonial and Foreign Government loans	37,243
British Municipal loans	1,262
Colonial and Foreign Corporations	16,164
British railways	1,983
Indian, Colonial and Foreign railways	55,286
	£111,938
Mining Companies	5,494
Exploration and Financial	9,164
Estate and Land	6,681
Electric Lighting, Power, etc.	7,507
Tramways and Omnibuses	8,610
Banks and Insurance	5,653
Manufacturing	9,587
Rubber and Oil	7,315
Iron, Coal and Steel	6,292
Miscellaneous	21,474
	£199,715

DESTINATION OF CAPITAL

	£000.
United Kingdom	35,811
British Possessions	71,258
Foreign Countries	92,646
	£199,715

It is not possible to say what proportion of this aggregate amount was subscribed by English investors ; but it is evident that the demand for capital is represented mainly by issues of the kind falling within the group of sound securities with which we are now concerned.

The public may have little direct detailed knowledge of the revenues or earning capacities on which these securities are based; but the reputation of the responsible parties enables them to form a fair estimate of the value of the securities offered, and it seems fair to assume, as has already been done, that their bargaining knowledge is reasonably adequate to protect their interests. Moreover, a moderate proportion of these securities are sold to the public through the intermediation of Issuing Houses of high financial standing, who have expert knowledge of the value of the securities which they purchase from the vendors and a direct business interest in maintaining their own reputation by refraining from selling to the public securities whose future yield is very precarious. These conditions strongly suggest that the opportunities and tendencies for any unfair dealings in this part of the market are negligible.

As implied in the preceding paragraph, the securities with which we are now dealing may be sold in either of two ways: the responsibility for the marketing operation may be undertaken by one of the great Issuing Houses, who buy from the vendors and resell to the public; or the risks of the operation may be borne by the vendors themselves acting through financial agents in London.

During the three years 1912–14 the leading London Issuing Houses undertook the sale of a large volume of securities: these issues included the stocks of foreign Governments such as China, Mexico and Brazil; those of the cities of New York and Bergen; those of Mexican and Brazilian railways, foreign telegraph and transport companies and a few large home industrials such as the debentures of the London General Omnibus Company. The volume of their sales is large, but it forms only a comparatively small proportion, considerably less than one-half of the total amount of high-class securities sold on the London market. The character of their work is indicated by the nature of the securities described; they deal only in the best qualities, and limit their operations almost entirely to the marketing of foreign, as distinct from home, securities.

The high reputation of these houses ensures that their interests are in a great measure identical with those of the investing public; but it clearly cannot, of itself, show that the margin between the price at which they buy and the price at which they sell to the public is such as to yield them only a fair payment for work done. It is very difficult to get any exact information as to the margin of profit which they obtain. One or two houses, it would seem, have substantially a monopoly in marketing the securities of certain foreign States; but in general it appears to be the fact that the price of purchase from the foreign vendor is settled by informal negotiations which amount, in effect, to competitive tender. A part of the margin between the purchase and sale prices goes, of course, to the underwriters, for practically all these issues are underwritten; while the payment going to the Issuing House seems to be determined, as one would expect, largely on a customary basis with special allowances for exceptional conditions. These considerations do not carry one very far; but they suggest that, in so far as the margin is determined on the one hand by the opinion of a well-informed public, and on the other by bargaining which amounts in effect to competitive tender, the English Issuing Houses are not likely on the whole to obtain from the public much more than a reasonable payment for their costs of investigation, their special knowledge of the market and the services of their business reputation and connections. And this conclusion is supported by the opinion of business men with knowledge of the actual facts of the situation.

More definite information is available with regard to the conditions of sale of the large remainder of high-class securities which are sold by the vendors through London agents; for it seems reasonable to regard as fairly typical of these conditions the methods of marketing Colonial and Indian loans recently investigated and described by Dr. Theodor Schilling.[59]

In the negotiation of these loans there are, it appears, four principal parties. Each government has, in the first place, a London representative by whom its general business is carried through; he may be an Agent-General, a High Commissioner, the Crown Agents for the Colonies or the Secretary of State for India. It has also a financial representative: for the Crown Colonies there are the Crown Agents; for New Zealand, Queensland and the Transvaal there is the Bank of England; for Canada and most of its provinces and towns, the Bank of Montreal; for South Australia, the Bank of Adelaide; and for the remaining Australian States, the London County Westminster and Parr's Bank. The banker, it seems, acts purely as an agent; he advises the London representative with regard to the market conditions and the price and date of the issue, and undertakes such work as the announcement of the issue, the receiving of subscriptions and the payment of dividends.

In addition to these representatives each government has its own broker, who is usually one of three large firms: Nivison & Co., who act for most of the self-governing colonies; Scrimgeour & Co., who deal mainly with the business of the Crown Colonies; and Mullens, Marshall & Co., who, as brokers of the Bank of England, take part in issues for which the Bank is the financial agent. Among other duties the broker advises the London representative prior to the issue and, after its terms have been settled, undertakes to place the underwriting. It would, perhaps, be more exact to say that he *allots* the underwriting, for it seems probable that the parties with whom he places it would usually accept their quota even though such a commitment happened at the moment to be particularly unwelcome. Finally, there are the Jobbers who, according to Dr. Schilling, play an important part in the work of issue, partly by undertaking a share of the underwriting, but mainly by their influence on the Stock Exchange quotations of the new security. Prior to its issue, it would seem, they encourage public subscription by "making a market" at prices which are in a great measure artificial (a practice prohibited during the war), while subsequent to allotment they agree with the brokers whether the securities should be quoted at a premium or a discount.

This brief indication of the functions of the various parties concerned in the sale of these securities makes it unnecessary to trace the procedure in detail. It may be noticed, however, that the method of issue has changed. The earlier practice of inviting subscriptions by way of public tender has now been abandoned; with rare exceptions the modern practice is to issue the loan at a fixed price, the risks of failure being covered by underwriting.

A more important question is that of the rates at which these various parties are paid for their services. Business tradition and feeling assign the whole of the loan operations of each government to its recognized banker; and the same conditions presumably govern its relations with its broker. It is hardly possible, therefore, for direct competition to play any important part in regulating marketing costs; the question whether or no those costs are excessive must be judged by other means. According to Dr. Schilling, the issuing bank receives ¼ per cent to 1 percent; the customary rate for underwriting (a rate rarely exceeded) is 1 per cent; while ¼ per cent is paid to the broker for placing the underwriting and a further ¼ per cent on applications bearing a broker's stamp. In addition to these payments there is a stamp duty of 2s. 6d. to 12s. 6d. per cent, together with the expenses of printing the prospectus and securities, and giving public notice of the issue. As to the expenses incurred by the London representative, and the special fee, if any, paid to the broker, Dr. Schilling gives no information; but it seems hardly likely that such costs would form any considerable addition to the total. Only expert knowledge can decide whether or no these rates form a reasonable payment for work done; but their total amount is not large, and is clearly much lower than the fraction which is usually absorbed by the market in effecting the sale of industrial stocks and other securities of a lower order of reputation.

The general impression which one derives from these facts is borne out by a consideration of the conditions in which State and Communal loans are issued in Germany. Dr. Riesser (1908) maintains that a vast amount of labour and sagacity is now necessary in order to earn a profit in the marketing of stocks of this kind.

The sale of these securities appears to be effected almost entirely by syndicates of banking houses: there are, for example, a Prussian syndicate for issuing Prussian State loans, composed of the Seehandlung and about twenty-eight other houses; a group for dealing in Imperial loans, headed by the Reichsbank and including some twenty-eight other firms; and other permanent groups formed to issue home State and municipal loans. These syndicates carry out their operations through managers who are responsible to an executive committee representative of the group. The first stage of the operation naturally consists of an inquiry into the value of the securities to be sold, to which may be added the settlement of detailed arrangements with regard to the provision of funds for the payment of dividends, the publication of notices and other minor matters. In determining the price at which the syndicate shall purchase from the vendors, and the price and date at which they shall issue to the public, an intimate knowledge of the market is necessary, for a wrong estimate of the potential demand, or an unforeseen change in the conditions of the market, may result in the bulk of the securities remaining unsold in the hands of the members of the syndicate. "The lower limit in this case, too, is the price to the underwriter, plus interest, stamps, fees and a profit, which, if possible at all, varies in the case of domestic and communal loans between ⅛, ¼ and, in rare cases, ½ of 1 per cent, while in the case of foreign state loans a profit of ¾ of 1 per cent is a rarity."[60]

The work of the syndicate does not end with the completion of the sale operation, for banking practice and etiquette extend its responsibility to the protection of the securities against unjustified fluctuations in their value. One method of checking fluctuations is to eliminate the "stag" by offering preferential terms to those subscribers who will deposit the securities they purchase with the issuing firm, undertaking not to sell them within a given period of some months after the issue. A more common method, however, is for the syndicate to protect the value of the securities by re-purchase in the market when prices fall in consequence of temporary causes which are unlikely to exert a permanent effect on their investment value. Some of the German syndicates appear to possess a monopoly of the issues in which they deal; but it is clear that their operations involve a great deal of work and considerable risks; and there seems to be no reason to suppose that the profits which they derive from this work are unduly large; indeed, a director of the Dresdner bank maintains that for years the marketing of German state loans has been generally a source of loss to the issuing banks.[61]

The well-nigh impenetrable obscurity in which high finance chooses to conduct its work makes it very hazardous to attempt to reach definite conclusions on the limited information which is available. It seems tolerably certain that Colonial and Indian securities are sold to the public at a fair price and at a moderate cost, and probable that the same thing is true of the securities marketed through the great Issuing Houses. Further, there seems every reason to suppose that English State and municipal securities, and, with one or two exceptions, home railway stocks also, are marketed honestly and tolerably cheaply.

These considerations do not justify the statement that the parties undertaking the marketing work never receive more than a fair payment for their services. They do, however, bear out the *a priori* assurance that there is little scope for abuse in the marketing of highly reputable stocks; and suggest the conclusion that the sale of these securities on the London market is carried out with reasonable efficiency and economy.

CHAPTER XXXI

NEW SECURITIES; THE VOLUME OF INDUSTRIAL SECURITIES

IN the previous chapter we dealt with the sale of high-class securities mainly from the point of view of the English investor, making no distinction between the parties, English or foreign, to whom capital was supplied. In this chapter we have to deal with the sale of a second group of securities consisting mainly of the stocks and shares of an immense variety of joint-stock companies operating at home and abroad. In considering the marketing of these securities we must adhere more closely to the main question with which this book is concerned, and endeavour to estimate the work done by the market in supplying capital to English undertakings. The principal questions, therefore, which we have to face are those of the scope and efficiency of the market in facilitating the sale of English industrial securities; we require to know the extent to which this particular market provides the capital which English business men require and the efficiency with which that capital is actually supplied. To answer these questions satisfactorily would require intimate knowledge of the marketing organization not only in London but throughout the Provinces, and would involve a discussion of very great length; for the published information is quite inadequate, and the great variety in the character of the securities marketed makes the matter one of exceptional complexity. It is as well, therefore, to state at once that the broad treatment of the subject, which is all that is attempted in these three chapters, can yield little more than general impressions open to considerable possibilities of error.

In approaching the first question with which we have to deal — that of the amount of capital annually supplied by this market to English undertakings—we are at once met by the difficulty that the available statistical information is exceedingly meagre. As, however, it is almost useless to discuss the work of the market with no knowledge of its scope, we must review the available information and endeavour to infer some conclusion.

We have, in the first place, *The Economist's* figures quoted on page 194, which show that the average annual applications (1911–13) for capital destined for home employment amounted to some £36 m. Deducting British Government loans, municipal stocks and English railway securities, we obtain a total of some £33 m. for what may be broadly described as home industrials. This figure is carefully compiled; it includes offers made only to shareholders, and excludes issues made by way of tender or for payment of maturing loans. It is perhaps the best obtainable; but it omits many industrials floated in the Provinces, and is made up of capital applications, not of capital actually subscribed.

The annual reports on companies issued by the Board of Trade add a little, but not much, to this information. They show that each year some 6500 new joint-stock undertakings are registered under the Companies Acts in England and Wales (as distinct from the United Kingdom); that there is a *net* annual addition to the register of some 3400 companies and £97 m. paid-up capital; and that in April 1914 the total number of these companies amounted to 58,000, with a paid-up capital of nearly £2300 m. To this figure must be added an estimated amount of £500 m. obtained from the sale of debentures,[62] making the total capital which they control about £2800 m. It may not, however, be assumed that any large fraction of this total capital was supplied by means of the machinery of the market; how small that fraction actually is may be inferred from the fact that in 1904, of 3477 new companies registered in London no less than 3068 filed a declaration that they were making no appeal to the public.[63] The explanation lies in the fact that the most common form of limited liability organization is not the Public, but the Private, joint-stock company. During the three years ending December 1913 an average number of 5400 Private companies was registered; in December 1914 their total number was almost exactly three-quarters of the whole. It does not, of course, follow that these companies control three-quarters of the aggregate capital, for their average size is probably small. But they include large and important firms, such as Harland & Wolff and Huntley & Palmers, and control an important part of the business of the country.

The legal form of the Private company was invented, or perfected, by the Companies Act of 1908. By this enactment the Private company was denied a public market in its shares (though not in its debentures): it could make no public offer of its shares, and was required to restrict their transferability and to limit the number of its shareholders; but it was granted the advantages of limited liability and joint-stock organization and excused the duty of publishing a prospectus, a statement in lieu, or an annual balance sheet. The very rapid growth of this form of organization, due not only to the creation of new undertakings, but also to the conversion on a large scale both of public joint-stock companies and private firms, is significant, therefore, in showing that the facilities of a public market are by no means the all-important consideration in the development of the joint-stock type of organization.[64] However, the point of importance at the moment lies in the fact that the vast majority of the joint-stock companies coming into being each year are either already in possession of their capital or obtain it by way of private negotiation.

In attempting to form any estimate of the amount of capital annually supplied to these undertakings by the agency of the market we have then to take account mainly of public companies, but even in this limited field the imperfection of the statistics makes any definite conclusion difficult if not impossible. The following statement shows the average number of new companies of various kinds annually registered in England and Wales during the three years 1911–13:

1. Companies of a kind which may be omitted from consideration, *e.g.* companies limited by guarantee	145
2. Private companies	5423
3. Public companies formed with a prospectus	378
4. Public companies formed without a prospectus	596
	6542

It is with the two kinds of Public companies included under 3 and 4 that we are now primarily concerned. In neither case is information given of the amount of capital annually subscribed by the public.

The returns distinguish, however, in respect of each of the companies in the former group, the "Amount offered for Subscription in Cash"; and these individual amounts added together yield an annual average of £17 m. But this £17 m. represents the demand for capital. A figure more representative of supply is found by summing the individual items given under the heading, "Amount allotted before commencing Business." The corresponding annual average of these amounts is £9½ m. This figure needs careful interpretation. It represents, very nearly, the face value of the shares actually bought by the public; it relates mainly but not wholly to capital destined for employment at home; it includes the full amount which may be called up on the shares actually sold; but it does not include capital which may be raised later by the public or private sale of further shares or by the issue of debentures. It forms a rough estimate of the amount of capital annually subscribed by the public to this group of companies on their formation. From the fact that only 165 of these 378 companies applied for a special settlement on the London Stock Exchange, it may perhaps be inferred that more than one-half were floated in the Provinces.

That estimate of capital subscribed is sufficiently rough, but it is more definite than the conclusion to be drawn from a consideration of the companies which "file a Statement in lieu of a Prospectus." The returns show in respect of each of these companies "the Amount Subscribed or which may be Subscribed in Cash"; and the sum of these individual amounts yields an annual average of £33 m. How much of this demand for capital was actually satisfied it is quite impossible to say. In the absence of any statistics, it seems not unreasonable to reduce the figure in the same proportion as that of the former group of companies, and reckon the capital actually supplied to be about £18 m.

Although a small proportion of these companies paid an underwriting commission, and a few may have marketed their shares through intermediary organizations in the form of an Offer of Sale, it seems clear that no considerable part of their capital could have been obtained by the normal method of public issue. The greater part of it must have been obtained mainly by private negotiation in the manner employed by Private companies and by cotton-spinning undertakings in East Lancashire, or by a gradual unloading of shares on the Stock Exchange. The former method would naturally be employed in many cases where a new undertaking, or an old firm converted into company form, offered prospects of success too good to be shared with the general public. If the amount of new capital it required were moderate, its securities could be readily placed among parties connected by personal or trade interests. Mr. Duguid, writing of the latter method of selling securities, says: "The shares of many excellent companies have been introduced in that way. Few, if any, of all the great Rand mining companies, with the huge dividends they have paid since, issued a prospectus. It was a case of 'making a market' in nearly every instance." 65

That this latter method is adopted on a considerable scale is suggested by the fact that more than a hundred of these companies annually applied for a special settlement on the London Stock Exchange.

We have then these three totals:

ANNUAL AVERAGES FOR THE THREE YEARS 1911–13

Capital applications for "home industrials" vide *The Economist*	£33 m.
Capital subscribed by the public to new joint-stock companies formed in England and Wales, under the Companies Acts, with a prospectus, say	9½ m.
Capital subscribed by the public to new joint-stock companies formed in England and Wales under the Companies Acts, without a prospectus, say	18 m.
Provisional total	£60 m.

This aggregate of £60 m. is less than one would expect; even so, substantial deductions must be made from it in order to obtain any estimate of the volume of capital annually supplied to ~~home~~ industrials by the market for new Stock Exchange securities.

(1) The first total consists, as already noticed, of applications for capital and not of capital actually subscribed; further, it relates to the United Kingdom, not only to England and Wales. A rough correction for these errors may be made by reducing its amount from £33 m. to £30 m.

(2) A substantial part of the second total is included in the first; for although a large proportion of these companies may be floated in the Provinces, those in need of large amounts of capital naturally make their applications mainly through the London market, and so are already included in *The Economist's* figures. When allowance is made for this and for the further consideration that, so far as may be judged by their titles, about one-quarter of these companies employ their capital abroad, this second total can hardly be reckoned at more than £4 m.

(3) The bulk of the third total is apparently obtained by the sale of shares by private negotiation and by unloading them on the Stock Exchanges. A small part is obtained by public issue in the form of Offers for Sale through intermediary organizations on the London market, and so is already included in the figures of *The Economist*. As a rather larger proportion of these companies appear to employ their capital abroad, the already conjectural total of £18 m. should perhaps be reduced to £12 m.

(4) It is probable that some part at least of the unsold shares of these two groups of companies are later unloaded on the Stock Exchanges or placed by private negotiation. As it is quite impossible to guess at the amount of capital which the companies may obtain in this way, it must be hoped that the margins of the other estimates are large enough to make this omission of inconsiderable import-

ance. Some addition must, however, be made for the Provincial sales both of debentures and of the securities of those Gas, Electricity, Water and Tramway undertakings which have not been formed under the Companies Acts and consequently have not yet been accounted for. But, as *The Economist's* figures include a large amount of debentures sold on the London market, and as the *total* annual increase in the capital of Gas and Tramway undertakings of all kinds amounted, in pre-war days, to only about £5 m.,[66] the allowance to be made under this head can hardly be a large one.

On the whole, it seems tolerably safe to conclude that, when these various corrections have been made, the aggregate figure does not exceed £55 m. per annum.

(5) It is important to notice that this figure represents at best only the amount of capital subscribed by the public; it does not represent the amount of capital passing through the market into real investment. Some of it is a mere transfer to vendors in exchange for property sold to the company, some of it is applied to pay off debts, some of it is absorbed by the promoter and other market agencies. Although the recipients of these sums may apply them to investment purposes, to reckon them in the present estimate would result in considerable duplication. The available information is quite inadequate to show what allowance should be made for this difference between the amount of capital subscribed and the amount applied to the extension of home undertakings; moreover, the difference is likely to vary considerably from year to year, with changes in the number of conversions of existing undertakings into the form of Public companies. An examination of the individual home issues in *The Times* Prospectuses[67] for 1913 suggests that in that year about one-sixth of the capital subscribed represented a transfer, rather than an investment, of capital. This proportion seems likely to be too low rather than too high. If we employ it to make the final correction we may conclude that in the three years 1911–13 (a period of active business) the average amount of capital collected by the market from the public and applied to the extension of home undertakings in England and Wales was in the neighbourhood of £45 m. per annum.

This figure, being based on conjectural estimates, is open to considerable possibilities of error; but precision is not required; its significance lies in its relation to more general considerations. It was commonly held in the City prior to the war that the annual savings of the United Kingdom were then about £400 m., and were devoted half to foreign, half to home investment. This figure is probably rather too great; but it seems tolerably certain that in 1907 the total addition to the capital invested in the United Kingdom was between £200 m. and £230 m.[68] When this figure is brought into relation with the facts and inferences of this chapter (see also Chapter XLIV), the contrast conveys a clear impression that the market for new Stock Exchange securities plays a smaller part than one would suppose in facilitating the movement of the annual flow of free resources into home investment.

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CHAPTER XXXII

NEW SECURITIES; THE SALE OF INDUSTRIALS

THE subject of discussion in this chapter is still the marketing of the second group of securities, consisting of industrials and other stocks and shares of a quality inferior to gilt-edged securities. But we are now concerned not with the scope of the market's work but with its efficiency. We have to consider, first, whether the general conditions governing the sale of these securities are such as to ensure fair bargaining between buyer and seller; and, secondly, whether the actual sale operations are reasonably effective and economical.

We approach the first of these two questions, bearing in mind the two general inferences reached in the preceding chapters: the one that the great difficulty of estimating the value of securities places sellers in a position of superior bargaining knowledge and so gives them considerable opportunities for deception; the other, that this condition is reinforced by the susceptibility to suggestion of the parties who buy these securities—a susceptibility which leads them, when some particular market is booming, to buy the securities in which it deals with little or no discrimination between those which are sound and those which are almost entirely worthless. But the imperfection of knowledge on the part of the investor, which is the basis of the opportunity for deception, varies according to the nature of the security. At the one extreme, the reputation of an old-established undertaking and the market record of its previous issues may form an adequate basis for a sound judgment of the value of a new issue offered in the market; at the other extreme, where a new company is being formed to exploit some doubtful industrial opportunity, the material on which to form an estimate of its prospective yield is so inadequate that the opinion of the ordinary investor is practically valueless and his purchase is an act of faith rather than of judgment. The one kind of security shades off gradually into the other, and no definite line can be drawn between the two; nevertheless, we may mark off from the group of industrials which we are now considering a number of stocks and shares whose conditions of sale are comparatively free from these opportunities for deception.

In 1912 and 1913, according to *The Times* Prospectuses, only about one-half of the issues of home industrials on the London market arose from the formation of new joint-stock companies. A large part of these issues consisted therefore of applications for capital to be applied to the development of existing companies, many of whom were firms of established reputation such as Lever Bros. or Associated Portland Cement Ltd. Moreover, a few of these issues, such as those of Vickers & Borax Consolidated, took the simple form of an offer to shareholders. In addition (not included among these issues), there were each year brief notices from some fifty Gas and Water companies inviting tenders for small quantities of their stocks. These facts show that a considerable proportion of the securities issued on the London market are sold in conditions which are free from anything in the nature of deception, and that a small proportion are sold in a manner which is very economical.

It might reasonably be expected that in the Provincial markets local knowledge on the part of the investor, both of the business reputation of the vendor and of the prospects of his undertaking, would do a good deal to eliminate dishonest promotion and ensure that securities were sold at prices fairly near their investment values. There seems to be no doubt that this is true of the securities of cotton-spinning companies (cf. pp. 267–8). According to prominent business men in the industry, the great majority of the new companies formed in the years immediately preceding the war were sound concerns and all were sound in intention. The directors would not usually be large subscribers, but they and their friends would be likely to hold perhaps a quarter of the issue; and the promotion would be governed by industrial rather than financial interests. A broker adds the opinion (Nov. 1919) that "there is practically no scope for a professional company promoter, especially at Oldham."[69] The securities are rarely sold by means of a prospectus and are not underwritten; they are placed by private negotiation among local people who understand the cotton trade. In this market at least, then, it would seem that the conditions of sale are such that securities are marketed both honestly and efficiently.

Information with regard to the Provincial issue of new securities is almost entirely lacking; but it is clear at least that the conditions of sale just described are not typical of those in other local markets. In Newcastle, for example, according to the opinions of several brokers, new securities are sold with the aid of a prospectus and are underwritten either locally or by large London houses. Opinion differs with regard to the opportunities of the promoters with a purely financial interest. But, according to one broker: "There is plenty of scope at the present time (1920) for company promoters either in promoting a company or by taking a financial interest in underwriting, etc. The flotation is usually undertaken by bankers, trust companies, etc., and they call in stockbrokers who possibly relieve the promoter of a large amount of the stock."

The formation in 1916 of B.S.T. Ltd. (British Shareholders' Trust) initiates an interesting and important development in the marketing of Provincial securities. The organization consists of a central Trust company in London and five allied companies in the more important Provincial centres. Its methods seem well adapted to reconcile the interests of promoter and investor and to facilitate the economical sale of securities. At each centre is an executive assisted by an advisory body elected from brokers nominated by shareholders of the Trust. It undertakes the marketing of new securities, the underwriting of issues and the sale of large blocks of securities of deceased people. The shareholders are composed in a great measure of those connected with the management of large undertakings; on the one hand, they bring to the notice of the Trust opportunities for profitable business; on the other, they form a market in which the Trust may quickly and economically dispose of at least a part of its issue. The organization is a powerful one, the aggregate capital of the six allied Trusts amounting to nearly £2½ m. It has already carried through a number of important issues and in one case underwritten an issue amounting to £16 m.

Having separated in this rough way, and with some digression, a number of securities whose conditions of sale offer little scope for the effective use of superior bargaining knowledge, we may turn to consider what devices are available to check the opportunities for deception attaching to the large remainder of industrial securities offered in the London market. These devices lie partly in the organization of the market, partly in the provisions of the law; they may be dealt with in that order.

Reference has already been made (see p. 109) to the possibilities of an organization intermediate between the sources of Demand and Supply which should investigate the earning capacity of ventures in need of capital, select the most promising, and sell their securities to the investing public with an implicit assurance that the venture had a reasonable prospect of success.

The history of the German Credit banks shows the great difficulties with which such an organization must deal, just as their success shows that these difficulties can be overcome. The comparative poverty of Germany about the middle of the last century and the great demand for capital to supply the needs of her rapidly growing industries led naturally to the development of banks which took a large and active part in providing the capital requisite to the creation and extension of business undertakings, both by the grant of long loans and the flotation of joint-stock companies. Prior to 1870 the banks often suffered heavy losses from their participation in industrial enterprise. So late as 1884, as is shown by the argument accompanying the new industrial law of that year, the formation of new joint-stock companies was associated with great evils: ". . . the leading promoters acted without any sense of responsibility and were exempt from any kind of control. . . . For a long time after its foundation the newly formed company possessed no corporate autonomy and remained defenceless in the hands of persons whose only object was their profit as founders. At the same time the public . . . had no reliable data whereby to form a correct estimate of the enterprise." In more recent times the banks have found it less necessary to take the initiative in industrial matters; their policy has become more conservative; "so far as newly formed companies are concerned, the broad results experienced during a series of years have led the banks to confine themselves as a rule to conversions of existing prosperous private undertakings into joint-stock companies and to co-operate in fusions and in increasing the capital of existing companies." "They hold aloof, however, as much as possible from investing money in perfectly new undertakings and from financing new methods of manufacture or inventions." [70] In spite of a more sober policy, wider experience and more perfect organization, it would seem that unwise or unfortunate industrial loans have very frequently compelled the banks against their will to recover their capital by the conversion of the borrowing firm into a public joint-stock company, and that their industrial operations still occasionally involve them in difficulty and loss. The great success with which the German banks have promoted the development of industry and trade is universally admitted, but it should not be overlooked that such work is attended by much difficulty and heavy risks.

An organization of this kind, intermediate between the sources of enterprise and the sources of capital, must evidently possess machinery for investigating business ventures, financial strength adequate to sustain the heavy risks to which it is exposed and the reputation and business connexions necessary for the efficient sale of securities to the public. An organization such as the Deutsche bank possesses these qualities in a high degree. Its practical administration (1914) is in the hands of a body of nine managers, all of them men of wide business knowledge, one or two of them admittedly of exceptional ability. It has a distinct staff of some eight or nine industrial experts, usually drawn from industry itself, and a highly developed department of information, while its system of unsecured advances keeps it in the closest touch with the position and progress of business concerns. It is easy to see that, with able management and machinery of this kind, the risks of industrial banking are greatly reduced ; business ventures in need of capital can be thoroughly investigated and the development of the more promising enterprises may be promoted with a reasonable prospect of success. Even so the risks are heavy ; for in the course of its growth the Deutsche bank has had "to write off repeatedly serious losses on account of participations and industrial business,"[71] though these were incurred apparently mainly in connexion with its commitments abroad. But apart from the possibilities of actual loss there is always the danger that the fortunes of the bank may be bound up for long periods with the prosperity of the industries in which its resources are employed. To meet these risks the Deutsche, like other German Credit banks, employs a paid-up capital very large in proportion to its deposit liabilities; it shifts the risks of some of its operations to subsidiary companies specially formed for the purpose,[72] and in large undertakings acts at the head of a very powerful group of allied banking and financial houses. Its great reputation, its branches and its "communities of interests" with banking houses throughout Germany naturally facilitate the marketing of the securities of the business concerns with which it is specially associated. How effective the wide connexions of a great bank may be in facilitating the sale of securities is shown by the ability of the Crédit Lyonnais to sell to its depositors, in four or five days, stocks to the value of 40 or 50 million francs.[73] But the responsibilities of the German banks are not ended even when a successful issue has transferred to the public the task of supplying capital to these concerns. They retain some measure of influence, partly by representation on the controlling boards, partly by the holding of shares, partly by the voting power of the proxies entrusted to them by shareholders who are at the same time their own customers. The fact that the members of the managing bodies of the Deutsche banks are represented on the boards of more than two hundred undertakings engaged in the most varied kinds of business is a somewhat impressive illustration of its immense responsibilities, and of the part it has played in supplying the capital required for the industrial development of the country.

It was suggested on pages 126–7 that the reasons why no organization on this scale had developed in England lay partly in the less rapid growth of our industries and in the large profits available for reinvestment in expanding businesses. But, whatever the reason, the fact remains that such agencies play very little part in the marketing of industrial securities in this country.

The great Issue Houses do some work of this kind; on the question how much more they could do, experts differ. "If," says Professor Foxwell, "our great Issue Houses would take up this work their help would be invaluable. They are accustomed to make exhaustive examinations of propositions submitted to them. They employ expert engineers, accountants and lawyers; and every pertinent detail in regard to process of manufacture, plant management, earnings, labour conditions and past history is taken into account. But the Issue Houses fight shy of ordinary home industrial propositions. They prefer those put forward by foreign Governments, municipalities, or the very largest transport companies. As a rule our English industries are too small in scale to attract the Issue Houses; the securities would not be marketable."[74] Whether these Houses are restrained from marketing home industrials by lack of adequate machinery for investigation, as they have sometimes maintained, or by the proportionately greater trouble of dealing in smaller operations, the fact remains that many ventures, possibly with excellent prospects, are laid before them and rejected; and that the part they play in this work is of insignificant dimensions.

A small group of minor financial houses, composed principally of Trust and Investment companies, also takes part in the marketing of home and foreign industrial securities, but to a very limited extent. Their intermediation no doubt increases the price paid by the investor; but it can hardly be doubted that it carries with it some sort of guarantee that the security purchased has a reasonable prospect of paying a fair dividend.

The growth of these intermediary organizations has been stimulated as a result of war, partly specifically, partly by the general loosening of traditional ideas. One notable result has been the formation of the British Trade Corporation designed, among other objects, to investigate the possibilities of business ventures in need of capital, to supply the needs of the more promising, and ultimately to undertake the sale of their securities to the public; several issues have already been marketed by the Corporation. More general effects are illustrated by one or two cases in which the responsibility for the marketing of home industrial securities has been assumed by an English Joint-Stock bank, and by somewhat increased activity on the part of the minor financial houses referred to above. This stimulus may be important in its promise, but its immediate influence on the manner in which securities are marketed is not large. It is still true that the vast majority of industrial stocks are sold without the assistance of any permanent intermediary agency.

CHAPTER XXXIII

THE SALE OF INDUSTRIAL SECURITIES (*continued*)

IN the absence of strong intermediary agencies with machinery available for the investigation of industrial propositions and the organization requisite for the efficient marketing of their securities, the work of selecting profitable new ventures, of capitalizing their prospects in terms of securities and of selling, those securities to the public, falls mainly to the company promoter ; while that of marketing further issues of existing companies is undertaken mainly by the companies themselves.

"The facilities provided by the promoter are," says Professor Foxwell, "a mere makeshift, 'utterly inadequate' " ; and it is not difficult to see that his methods of operation contain within themselves strong tendencies to over-valuation and to heavy marketing costs.[75]

The promoter is not a very definite kind of person. He may be a parent company engaged in the formation of a subsidiary or allied business enterprise ; he may be, and very often is, the vendor of the assets purchased by the new company ;[76] or he may be a financier whose contact with the new company ceases when he has completed its flotation and sold any shares which may have been allotted to him. But whoever he may be, his interests *as promoter* are quite distinct from those of the company he forms. This is most clearly seen when a company is floated by a financier, by one whose interest lies only in the process of promotion.

It is characteristic of the London market that its financiers are moved mainly by financial as distinct from industrial interests ; they prefer to employ their capital for short periods and to draw from it a purely financial profit rather than commit it to the uncertainties of business enterprise ; they are unwilling to adopt the plan, common in Germany, of associating themselves with the fortunes of a new venture until it has proved its worth and can suitably be sold to the investing public. Accordingly, when a new company is floated by a promoter, his interest is in general bound up, not with the ultimate earning power of the venture, but with the difference between the price at which he buys from the vendors and the price at which he sells to the public. So far, therefore, as his influence governs the conditions of the flotation, there is inevitably a strong tendency to over-valuation. In many cases, no doubt, this tendency is checked by the industrial interests of the promoter himself, or of the parties with whom he is associated; for example, the vendor of an old-established business may retain a substantial interest in its fortunes, while the business reputation and interests of other parties concerned may be dependent upon the success of the venture. It may be admitted that in many cases the predominance of industrial interests ensures that the company is reasonably capitalized. But it remains true that there are many opportunities, especially in times of boom, which enable the promoter to sell to the public the securities of new companies whose capital is far in excess of the prospective earning power on which it is based. We have to consider the manner and degree in which these opportunities are restricted.

Some measure of the value of a new issue is given by the standing of the broker whose name appears on the prospectus. The appearance of the name of a reputable broker would not, indeed, show that he had investigated the prospects of the venture, but it would usually carry with it the assurance that he had satisfied himself as to the business integrity of the responsible parties. In a considerably less degree the name of the banker carries a similar assurance; for a large joint-stock bank does not willingly associate itself with worthless issues. Further, the official list of quotations enables the investor to strengthen his judgment by comparison of the price of similar issues, while invaluable assistance is given by the impartial criticism of the more independent part of the financial press and the expert advice of the investment broker. It seems not too much to say that if the investor would only make reasonable use of these facilities he would receive ample protection from the unscrupulous company promoter. In fact, however, he does not do so; for every year some millions of pounds' worth of securities are sold at prices well above their investment values. It would be an easy conclusion that, inasmuch as loss arising from unintelligent action forms a penalty, an evil which tends to bring about its own cure, these speculative losses might be left unhindered to work out their effects in rationalizing the conduct of the investor. But this ideal is distant and the waste of resources large. Meanwhile, therefore, any protection which the law can give may be welcomed.

The main principle on which English law proceeds in order to lessen these evils is that of enforcing publicity of matters requisite to the formation of a sound judgment of the value of a new issue; it endeavours to equalize the bargaining knowledge of seller and buyer. The prospectus, the document in which the company publicly offers its securities for sale, must among other matters contain information on the following essential points. As it is clearly of the first importance to the investor to know the value of the assets acquired by the company, the law requires that the prospectus should disclose the price paid to the vendor. This requirement is not a strong one; it does not make provision for any independent valuation of the assets purchased by the company; it does not even require that the price at which the vendor himself may have bought the property should be stated; and it does not prevent unscrupulous directors from concealing the information required by including it among a multiplicity of minor contracts. For obvious reasons the law requires that the names, qualifications and remuneration of the directors should be stated, together with full particulars of any interest they may have in the promotion or in the property acquired by the company. It requires, too, the contents of the Memorandum of Association, particulars with regard to founders' shares, etc., and provision for the inspection of material contracts. The minimum subscription on which the directors will proceed to allotment must be given; for "inadequacy of capital has been one of the most frequent causes of disaster in joint-stock companies."[77] Further, the prospectus must show the amount of the underwriting commission, the payment to the promoter and in general the amount of the preliminary expenses. In addition to these provisions for the publication of essential facts, the law places the promoter in a fiduciary position in relation to the company, so that he may not make any profit at the company's expense without its knowledge and consent; and it makes directors liable for any false material statement in the prospectus unless they can prove that they had reasonable grounds for believing the statement to be true and did so believe.

It is evident from the nature of these provisions and from the facts of the market that the requirements of the English law do not destroy the opportunities for deception open to the unscrupulous promoter; moreover, the spirit of these provisions may be in part evaded by the frequent practice of publishing an abridged prospectus containing the more attractive facts, together with a reference to some office at which copies of the full statement may be obtained or inspected. As an indication of further legal possibilities, some points may be noticed where the legal requirements of foreign states are more stringent than those of this country

One of the weakest points in the English law lies, it was noticed, in the lack of any requirement for an independent valuation of the property taken over by a company. In France, the value of the assets acquired by a public limited company and the consideration for any profits granted to promoters must both be examined by a committee of scrutineers appointed by the shareholders and approved by the shareholders themselves. In Germany, a Committee of Inspection, composed of directors and shareholders, examines and reports on the assets transferred to the company, as disclosed by the declaration of the promoters.

There are advantages in preventing companies with a small paid-up capital from displaying an immense nominal capital for the purpose of obtaining undue credit from the public; and further, though not unmixed, advantages in requiring that shares shall be of a certain minimum amount, in order, as a director of the Dresdner bank expressed it,[78] " to confine investments in stocks of companies . . . to people of means and responsibility, . . ." and in order to restrict speculative operations by people of small means. English law is little concerned with this. In 1891, for example, a company was registered in England with a capital of 9,600,000 shares of ¼d. each, the total actually subscribed being 1¾d.; and there seems to be no legal obstacle to a similar issue at the present time. French law regulating the formation of public limited companies is much more stringent. It requires: that the nominal value of shares shall be at least 25 francs; that the authorized capital shall be subscribed in full; that 25 franc shares shall be fully paid up and that at least one-quarter shall be paid up on shares of larger denomination. In Germany, the shares of such companies must be of a minimum nominal value of 1000 marks, though this limit may be reduced to 200 marks in certain special cases. Except when the promoters take up all the shares themselves, the company is not legally formed until the whole of its share capital has been subscribed and fully paid.

A further point of difference lies in the fact that English law is content to entrust the financial stability of a public joint-stock company to the ability and integrity of its directors. Both France and Germany, on the other hand, require that 5 per cent of the annual net profits shall be placed to reserve until the company has accumulated a fund equal to 10 per cent of its nominal capital. German law goes further; it compels the company to make provision for the depreciation of fixed assets, and to write off formation expenses; such expenses may not, as in England, be included among the assets in its balance sheet.[79]

It is difficult to believe that among these and other legal devices of foreign States there is nothing which could be adapted to improve the company law of this country, more especially as our law, according to Prof. Foxwell, " is less exacting in its safeguards than that of any other great business community, except, perhaps, the State of New Jersey."[80] How urgent the need for amendment is, must be judged partly by one's confidence in the power of freely developing organizations to eliminate, themselves, their moral and technical defects, partly by the magnitude of the social evil awaiting remedy. Various estimates showing immense losses falling on the public from their association with joint-stock companies are given by Dr. Stamp in his *British Incomes and Property*; but his criticism of these figures is too thorough to make it necessary to quote them here. Some idea of the magnitude of these losses may perhaps be derived from a Board of Trade return[81] showing that in 1896 no less than 1261 companies went into liquidation, involving a loss incompletely estimated at £15 m. The full loss, amounting, perhaps, to £21 m., is large and of course relates only to companies actually wound up; but it is less than 1½ per cent of the £1500 m. at that time invested in joint-stock companies and exposed to the ordinary risks of business.

The manner in which losses of this kind may occur is shown by an article in the *Investor's Monthly Manual*,[82] which distinguishes two kinds of prospectus: those expressing a demand for capital, and those responding to a public demand for shares. It says, "The typical boom company, as we have pointed out, sees the light only because the public is on the feed; the properties are bought up from their original owners by syndicates which know very little about them, and are probably incapable of judging their true value; the syndicates are eager to buy, and as there are many promoters in the market all pursuing the same object, they are likely to pay a fancy price for whatever they acquire. Then they have to make their own profit, which increases the capitalization, and so by the time the property is in the hands of the public it is valued at a very generous figure."

The impression given by these various considerations is borne out by the opinion expressed by a strong committee appointed in 1905 "to inquire what amendments are necessary in the Acts relating to Joint-Stock Companies. . . ." "We have already expressed an opinion," they say, "that the number of companies into the management or formation of which fraud enters is small in comparison with the number of sound undertakings registered and working under the Acts, and this being so, the dishonest director is the exception. We think that nothing could be more unfortunate than that provisions designed for checking and punishing dishonesty or gross negligence should be turned into an engine of oppression for honest and prudent men."[83] This opinion may be supplemented by that of Sir F. B. Palmer, one of the highest legal authorities on the subject. He says, " . . the provisions of the Act [of 1908], interpreted and supplemented by the many important decisions of the Courts, . . . form together a comprehensive and, in most respects, admirable system of law . . . a system which contrasts very favourably with the complicated formalities and the hard-and-fast regulations and restrictions imposed by not a few foreign systems of law in regard to companies and co-operative enterprises. Unlike these systems, the policy of our law has been to accord the utmost liberty in regard to the formation, the carrying on, and the dissolution of companies; and although this freedom has at times been abused by unscrupulous persons for their own ends, necessitating the intervention of the legislature, such abuses are but an insignificant item in comparison with the vast amount of honestly formed and honestly managed companies."[84]

In this discussion we are dealing with vague ideas. The evils of fraud merge gradually into those of superior bargaining power, and these evils pass gradually into those of excessive marketing expenses. Although the number of fraudulent companies may be only a small proportion of the whole, there is a much greater number in whose flotation an unduly large fraction of the public subscriptions is absorbed by the agencies composing the market. A part of this capital is diverted to promoters, vendors and other parties as a result of the superior bargaining knowledge which enables them to sell properties far above their investment values. This is undoubtedly an evil, but it is mainly a transfer rather than a destruction of wealth. A second part of the capital lost by the public has a greater social significance, for it is entirely dissipated in the excessive marketing costs often necessary to persuade the public, rightly or wrongly, of the worth of the venture.

It is only to be expected that the costs at which a small industrial venture obtains its capital through this market should be rather heavy. It is demanding capital from a public which knows nothing of it, and is offering as security only its prospective earning power; in addition, therefore, to the expenses of its formation it must expect to pay heavily for the advertisement by means of which it can effectively present its case, and for the borrowed reputations of the broker and other parties by which that case is supported. Further, this particular method of obtaining capital by way of a public offer of shares involves risks peculiar to itself, for if the issue fails it cannot in general be repeated; the venture stands or falls on this chance. The company must, therefore, usually be prepared to insure against this risk by paying an underwriting commission.

"The cost of an issue," says Mr. Lowenfeld, "depends entirely upon the number of prospectuses sent out, the amount spent on advertising, the fees paid to the bank which receives the applications, to the brokers, solicitors and accountants whose names appear on the prospectus, and the cost of the underwriting fee. These expenses are very heavy in any case, and hardly ever amount to less than £2000 even on a modest issue. But as there are some firms of brokers and solicitors who consider themselves but poorly remunerated by a fee of 1000 guineas for merely giving the promoters the right to print their name on a prospectus, their work and out-of-pocket expenses being paid extra, and as it is quite easy to spend £5000 on advertising a prospectus, the cost of launching some issues very considerably exceeds the smallest sum which can be expressed in five figures. Whenever the issue is large this does not matter, as even £25,000 is only 2½ per cent of £1 m.; but on small issues of £50,000 or £100,000 the expense is proportionately burdensome." [85]

Mr. Lowenfeld's opinion seems to be a fair statement of pre-war marketing costs; his figures must, of course, be increased in adaptation to post-war conditions. A general figure representing the average cost of marketing industrial securities would evidently have little meaning, by reason of the wide differences in the size and reputation of the companies and the market conditions at the time they were floated; but certain general inferences may be drawn.

It is clear that the smaller, the more obscure, and in general the more worthless the undertaking seeking capital in this market, the heavier are likely to be the expenses of the advertisement by which the public is persuaded to subscribe, and the underwriting commission by which the issue may be insured against failure. An idea of the pressure exerted by the opportunities for deception may be seen in the rates paid for underwriting, which amount frequently to 10 per cent, sometimes to 25 per cent and occasionally to more than 50 per cent on the portion of the issue underwritten.[86] Further, while the costs of marketing the stocks of the smaller and more obscure undertakings may form a heavy deduction from the capital subscribed by the public, those involved in the marketing of large issues of sound industrial stocks and gilt-edged securities may constitute only a very small fraction of the capital supplied. From these facts, and the circumstances that the opportunities for overvaluation are much smaller in the latter than in the former kind of issue, we may infer that the English market for new Stock Exchange securities is much better adapted to supply capital to such bodies as foreign states, railways and other large undertakings than to meet the demands arising from small industrial ventures. But, while it may be admitted that the market is most efficient in supplying large quantities of capital to reputable bodies, it must be recognized that its wastefulness in meeting the needs of smaller ventures might be largely remedied by the development of strong intermediary organizations, and that, even without these organizations, it performs an important service in making capital available for risky commercial and industrial experiments at home and abroad.

CHAPTER XXXIV

THE MARKET FOR OLD STOCK EXCHANGE SECURITIES

WHEN securities have once been sold through the agency of the Issuing Houses, the Company Promoter and so on, they depend for their subsequent marketability upon the organization which it is the business of the present chapters to discuss. This organization extends throughout the entire country, varying in form from the highly developed market to the informal arrangements of the country broker and auctioneer.

At one extreme is the vast organization of the London Stock Exchange, perhaps the most highly specialized market in the world. About it, as about the New York, Paris and Berlin Bourses, is a market composed of "outside" dealers, uncontrolled by the regulations affecting members of the organized market. "In London," says Mr. Powell, ". . . the honesty and substance of some of the big 'outside' firms are beyond question," but they are, perhaps, not so representative of this market as are the "bucket shops" and similar firms who, having no reputation to lose, use their superior bargaining knowledge without restraint to make gains at the public loss. As an illustration of the activities of this market Mr. Powell may again be quoted. Speaking of securities unquoted on the Stock Exchange he says, "At the moment [1910], for instance, there are something like 200 skating rink enterprises, with capitals of less than £20,000. . . . Where there are many shares of a particular class, *e.g.* the rink shares already mentioned—an enterprising broker here and there will constitute himself the market in them. If he is an 'outside' broker he will send out circulars by the thousand, offering to buy or to sell. These shares form in truth the bulk of those quoted by the great financial dailies." [87]

Next in order of development come the large Provincial Stock Exchanges at Manchester, Sheffield, Newcastle, Cardiff and some fourteen other important centres. Large absolutely, these markets are small comparatively; the membership of the Liverpool Exchange, for example, being 150, or about $\frac{1}{28}$ that of London; further, there is no technical, though there is a partial practical, distinction in these markets between the broker and the jobber. These Exchanges deal mainly in such securities as local industrial and municipal stocks. Not wholly, however, for Glasgow, largely a speculative market, deals widely in Oil shares and Birmingham is an important centre for Cycle and Rubber Tube Stocks. Sheffield deals especially in iron, steel and coal securities; Manchester with textiles. Quotations in these markets depend mainly on local information with regard to industrial conditions; they do not vary, as gilt-edged securities and debentures do, with monetary and political conditions, nor do they take their tone from London.[88]

Some of the smaller Exchanges, *e.g.* Oldham, exist mainly as centres at which brokers meet weekly to compare prices preparatory to the issue of the Stock and Share List, most buying and selling being done off the Exchange by individual negotiation. By means of the telephone linking brokers with one another, the whole of the North of England seems to be practically one market for many of the securities in which it is interested.

Finally, there are the smaller Provincial towns where there is no price list and the market is formed by one or more stock and share brokers, who may, perhaps, combine this work with that of an estate or insurance agent. The work done by these brokers is limited, in some parts of the country at least, to that of finding a buyer or seller in response to a request from a customer to sell or buy. In response to a request to deal in some local security they would perhaps give a quotation, but their customer might have to wait long for the discovery of another party willing to deal in the opposite direction. A supplement to these facilities is found in the public sale of securities occasionally arranged by firms of auctioneers.

It may not be assumed that this organization, extensive as it is, enables all securities, or even any very large proportion of them, to be readily marketed. Even on the London Stock Exchange, as is well known, the quotations of many securities are only nominal; they have no active market and can be dealt in only at a considerable sacrifice in price. Provincial markets are naturally far less effective; many small but sound local industrials can neither be bought nor sold within any reasonable margin of price or period of time; the holders of such securities are often, in this respect, in a position little better than partners of the business; and they must normally be paid a high rate of return to compensate them for their inability to recover their capital at will. According to Mr. Lowenfeld, "There are over 35,000 investments in Great Britain, of which only about 5000 are officially quoted on the British Stock Exchanges, and of all these less than 400 have at any time a free market. These 400, however, are constantly changing, some dropping out and others taking their place."[89]

In discussing the organization for marketing old securities, therefore, it is very necessary to bear in mind that the conditions in which the majority of securities are bought and sold are very different from those found in the London market. In the following pages the discussion will be limited to the conditions of the London Stock Exchange, because the characteristics of the market are naturally most clearly seen where its organization is most highly specialized; but this limitation is made on the understanding that London is regarded as representative, not of the organization as a whole, but of its most highly developed form.

CHAPTER XXXV

THE LONDON STOCK EXCHANGE

THE pictorial writings of Mr. Hartley Withers, Mr. Duguid and a host of other writers make it more than unnecessary to give any descriptive account of the London Stock Exchange. All that is required here is to indicate some of the general characteristics of the market, and those features of its organization which are essential to an understanding of its functions. The details of this organization are more conveniently dealt with in the following chapters, where the operations of the speculator are examined. No account is given here of the effect of the temporary restrictions laid on the market during the war; for there seems every reason to suppose that the last of these restrictions will be removed before long and that the nature of its operations will remain substantially that of pre-war days.

It has already been noticed that although the Stock Exchange is ancient in origin, its principal development, like that of the railway, has taken place during the course of the last hundred years. The growth of the London Stock Exchange during this period has been encouraged by a freedom from legal control which is in sharp contrast with the rigid State regulation of the Berlin and Paris Bourses, and by the immense volume of our foreign investments which largely determines its character as an international market. In speculative activity and in turnover it is surpassed by the New York Exchange; but in size, measured either by the number of its members or the volume of the securities in which it deals, it exceeds that of any other market in the world.

The London Stock Exchange, although a unified body, soon, perhaps, to be under the single control of a committee of management, is more conveniently regarded as a group of markets; for it is subdivided into groups of jobbers, each group specializing in a comparatively narrow range of securities and "making a market" in them by their willingness to buy or sell a reasonable amount in response to the demands of the expert agents of the public—the brokers. These sub-markets are connected with one another; partly by a psychological affinity, for they are all formed by groups of men subject to the contagion of depression or optimism; partly by the fact that money forms one side of every transaction throughout the Exchange; so that a variation in money rates is likely to affect all the sub-markets in the same way, though, no doubt, to a widely different extent. But in spite of these common influences the various sub-markets are largely independent of one another, for the characteristics of each are naturally determined in the main by the nature of the securities in which it deals and the temperament of the particular group of the public whose operations it carries through. The incidents of the market for municipal stocks or similar investment securities necessarily differ very widely from those of what Mr. Withers could once call the "boiling whirlpool of the Kaffir Circus."

Bearing these differences in mind, let us pass on to consider the function of the Stock Exchange as a whole; let us endeavour to distinguish the economy which it effects in the social organization, and the principal conditions on which the efficiency of its work depends.

This economy may be expressed in several ways, each of which is useful in its own field. We may begin by recalling a general conception expressing it in terms of a reduction of the efforts and sacrifices involved in the supply of capital. The market for *new* securities, as already noticed, links the group of capitalists who possess capital, with the group of business men and other parties who employ it. By means of this market capital is carried from one group to the other; and, as a result of its activities, there remains in the hands of one group a vast amount of capital, and in the hands of the other group a corresponding amount of securities involving a continuous supply of Waiting and Risk-bearing. The organization of the Stock Exchange lies within this latter group of capitalists, and its work consists in facilitating the transfer of securities among the members of the group. These facilities for the rapid and convenient exchange of securities yield an important social economy; they enable the burden of Waiting and Risk-bearing to be continuously shifted from one capitalist to another in accordance with the exigencies of his particular circumstances; they enable this burden, therefore, to be continuously shifted to those who from time to time are most willing to assume it and will bear it at the lowest price; in other words, they lower the real costs of maintaining outstanding the stock of capital transferred to other parties by the market for new securities, and consequently lower its supply price. It follows that by means of this organization each capitalist is enabled to supply capital in the quantity and for the period which is most convenient to him. Accordingly, by slightly shifting the point of view, we may regard the Stock Exchange as a device which adds together small quantities and short lengths of capital, and by increasing the quantity coming forward lowers its supply price.

In case these general conceptions may appear to be rather remote from actual practice it may be as well to connect the two by retracing the argument from the basis of particular operations. The Stock Exchange facilitates the exchange of securities. By enabling securities to be *bought* quickly and cheaply it encourages investment, and so increases the quantity of capital coming forward. By enabling securities to be *sold* quickly and cheaply it relieves the investor from most of the insecurity to which he would otherwise be exposed in supplying capital for uses from which it cannot readily be withdrawn. This last consideration is especially important; for the purchase of new securities generally involves the supply of capital for very long periods, and it is only reasonable to suppose that but a small part of this capital would be supplied were it not for the work done by the Stock Exchange in enabling the investor to recover the market value of his security, not from the party to whom he has supplied his capital, but from some other party with resources available for investment (cf. p. 94). The importance of this consideration is illustrated by the fact that the control of the Treasury over the issue of new securities during the course of the war has been exercised solely by withholding the advantage of quotation and, therefore, of purchase and sale on the Stock Exchange.

The Stock Exchange, the market for old securities, is then an organization within the group of capitalists, intimately connected with the market for new securities lying between the group of those who supply capital and the group of those who employ it. It may be regarded as a device for reducing the real costs of supplying the Waiting and Risk-bearing associated with the outstanding stock of capital; or as a device for making short lengths and small quantities of capital available in large amounts for long periods; or as an organization providing particular advantages to individual buyers and sellers; but in all cases its ultimate social economy may be expressed in the same terms, namely, in its influence in lowering the supply price of capital.

The work done by the Stock Exchange in lowering the supply price of capital depends then on the efficiency with which it facilitates the transfer of securities; this efficiency, in its turn, depends on a set of conditions which we have now to examine.

It must be noticed, in the first place, that the efficiency of the market is to be measured, not simply by its effects in facilitating the exchange of securities, but by its effects in facilitating their exchange *at a price*. An investor who wishes simply to buy or sell can do so, if he chooses, without using the services of the market;

he has only to offer a sufficiently attractive price and he will at once call forth sellers or buyers. But if he wishes, as of course he does wish, to buy or sell at a price as close as possible to the true value of his security, he is likely to find it difficult, if not impossible, immediately to find a party with whom he can deal. It is evident, therefore, that the efficiency of the market must be measured by its effects in enabling securities to be quickly and cheaply bought and sold at prices as close as possible to their true values.

This definition at once raises the question—What is the "true" value of any security? It seems safe to say that theory can give no perfect answer to this question; for human valuations depend on many unstable influences, and philosophers are unlikely to agree in the selection of those which do and those which do not affect "true" value. If, for example, a short spell of dull weather makes risk-bearing more onerous and momentarily lowers the market price of speculative securities; or if the small possibility of exceptionally large dividends from mining securities, by exercising an influence on the investor's mind out of all proportion to their actuarial value, causes the value of such securities to be maintained at an unreasonably high level; or if sympathy with a belligerent State raises the value of its stocks; should these causes be reckoned among those which determine what one vaguely conceives as the true value of these securities? But if perfect accuracy of conception is unattainable, an approximation sufficiently close for present purposes may, perhaps, be reached on the assumption that the current price of any security should correspond to the actuarial value of its prospective yield as estimated by well-informed market opinion. In other words, its price should be such as would give the purchaser a reasonable expectation of obtaining a return equivalent to the net rate of interest, plus normal earnings of management for the business ability exercised in undertaking the risks and trouble involved in the investment.[90]

If the market price of securities were determined on this basis it would be broadly true that no stock would ever be "dear" or "cheap" to purchasers in general. The investor, buying at random consols or rubber shares, would know that in the opinion of the market his purchase would yield him a normal return on the services he would be called on to supply; and his choice between one security and another would be determined almost entirely by his capacity and inclination to undertake the requisite work of management. This conception is no more than an approximation. It leads to a definition of the "true" value of a security as a price such that the investor may reasonably anticipate a return equal to the sum of the supply prices of pure Waiting, and of the business ability employed in management (cf. p. 80). That being so, let us call this price the Investment Value of the security and estimate the work done by the Stock Exchange in terms of its efficiency in facilitating the exchange of securities at prices approximating as closely as possible to their Investment Values.

CHAPTER XXXVI

THE LONDON STOCK EXCHANGE (*continued*).

THERE appear to be two main conditions which determine the ability of the market to facilitate the exchange of securities at prices approximating closely to their investment values: the first is the *number* of people whom it brings into business contact; the second is the *nature* of these people, in particular their reasonableness and financial strength.

It is clear that the larger the number of people whom the market brings into business relations with one another the smaller is the price change necessary to call forth a buyer or seller in response to a demand to sell or buy, and the smaller, consequently, is the divergence from investment values due to difficulties of marketing. In actual practice the advantage of large numbers shows itself in the form of a narrowing of the jobber's "turn"; for the greater the number of people composing the market for any security, the greater is the jobber's assurance that he will be able readily to "undo his bargain" and complete his operation, and the narrower, consequently, is the margin between the prices at which he is prepared to deal as buyer or seller. It is a commonplace that securities which form part of a large issue, and are dealt in readily at a small margin of price, maintain a higher average value from their easy marketability. On the other hand, investors are naturally rather shy of small issues; partly, perhaps, because they cannot buy readily, but mainly because if a change in their circumstances requires them to sell out quickly, they cannot do so without an appreciable sacrifice in price. A small market in any security is likely, therefore, to result in a twofold tendency for the price of the security to diverge from its investment value: the price will be easily driven up and down by the individual pressure to buy and sell, and the average price will be depressed by difficulties of marketing. The same conclusion may be expressed in positive terms by saying that a large market, by increasing the volume of dealing, lowers the costs of marketing, and by so doing maintains prices in closer conformity with investment values. This consideration is no doubt partly responsible for the growing practice on the part of municipalities of raising money by way of collective public issues.

The organization of the Stock Exchange contributes directly to increase the numbers in the market; for it brings into business contact with one another both people who are separated by space and people who are separated by time. The jobbers who form, as it were, the core of each of the markets on the London Stock Exchange, are usually prepared to buy or sell on demand, subsequently undoing their bargain by dealing either with a second party who is already in the market or with some party who may appear in the market at a later date. By way of illustration we may suppose that an investor sells a stock, through his broker, to a jobber who deals in that particular security. If the jobber resells that stock on the same day to a broker representing a second investor we may regard his operation as one linking two investors separated by space. But if he is unable to find a party to whom he can sell immediately, he must carry the stock until a second investor appears in the market in the form of a buying order through his broker; and the operation of the jobber must, then, be regarded as one linking two investors separated not only by space but also by time.

But although the organization of the Stock Exchange is an important influence in widening the market, the numbers of people in any particular market must be largely determined by other conditions. As already noticed, the quantity of a security itself affects the size of its market. Its quality is hardly less important, for a speculative rubber issue is likely to draw into its market a much larger number of the public than a sound debenture stock of similar amount. So, too, with regard to the denomination of the security; an issue of £1 shares is likely to be more widely held than a similar issue of shares of £5. Moreover, the size of the markets is influenced by more general conditions, such as the development of the tape machine, the financial press and other forms of communications, the wealth of the population, their tendency to speculation and their taste in investment.

The efficiency of the Stock Exchange depends to a considerable extent upon the numbers of people whom it brings into business relations with one another; but it depends, perhaps, even more upon the quality of these people. For if securities are to be exchangeable at or near their investment values, the market must be able to maintain prices against buying and selling pressure which originates in undue optimism or depression; it must be able to protect the current prices of securities against fluctuations due to influences other than those which rightly enter into the determination of their investment values.

The composition of any particular market is naturally determined largely by the nature of the security in which it deals;

sound stocks which yield a steady return attracting the conservative investor; risky securities of more uncertain yield attracting the more speculative members of the public. But, given this general condition, the power of any market to prevent prices from being driven above or below their true level necessarily depends on the character of the particular group of whom it is composed; the more largely it is composed of people whose operations are governed by emotion and limited by financial weakness, the more likely is it to be a weak market with an unstable level of price; on the other hand, the more largely it is composed of strong capitalists, whose operations are governed by intelligent estimates of future yields, the more likely it is to be a strong market with a level of price conforming closely to investment values.

These general considerations are developed more fully in later chapters; at the moment we need do no more than indicate the manner in which the efficiency of the market is influenced by the operations of some of the different types of people who compose it.

There are considerable numbers of people among the general public who dabble in speculative securities with practically no knowledge of their value and with very limited resources. The mere fact that the price of a security is rising causes them to buy, a kind of herd action which operates cumulatively and drives prices higher still. When the reaction comes and price falls, the limited extent of their resources, reinforced perhaps by a touch of panic, compels them to sell, and general selling drives price rapidly downward, perhaps far below its true level. Such operations may increase the activity of the market in the same way as large numbers do, but their influence on price is disastrous, and their net effect is undoubtedly to lower the efficiency of the market. In sharp contrast are the operations of Trust companies, financiers and other parties with an intimate knowledge of securities, and the resources which enable them to retain their holdings of a stock during a period when its value may be unduly depressed. The operations of parties of this kind contribute directly to the efficiency of the market; for, by their willingness to buy securities when their prices are unreasonably depressed, and to sell securities when their prices are unreasonably raised, they increase the power of the market to resist pressure of buying and selling which is unjustified by the facts of the situation, and to maintain prices at levels more nearly approaching investment values.

Finally, there is the work of the jobber, acting in response to the public demand or on his own initiative; through his hands all operations pass; and on his ability and financial strength the efficiency of the market is largely dependent.

A minor influence affecting the work of the market is that of the supply of money. As is well known, very large sums are borrowed by the public mainly to finance their speculative operations, that is to say, to enable them to buy and hold securities in anticipation of a rise in their values. This money is obtained partly by direct borrowing from the banks and other parties with disposable funds, partly from Stock Exchange firms who lend their own money and also money which they obtain from banking and other sources. The great scale on which their borrowing is undertaken is partially indicated by a return made in October 1914, which, it is believed, showed that at that date the loans outstanding in the hands of London Stock Exchange firms amounted to no less than £81 m. The volume of securities held by means of borrowed money no doubt varies widely from time to time, but it is clear that the average volume must be very large indeed.

A rise in Bank rate or any other cause tending to contract the supplies of short-loan money necessarily curtails these operations and depresses the prices of securities, while a change in the opposite direction gives a lift to market prices. The great instability of rates on the London money market must then be reckoned as a cause, though not perhaps a very important one, tending to affect adversely the efficiency of the London Stock Exchange.

Before passing on to consider in more detail the influence of the speculator on the efficiency of the London Stock Exchange we must notice a secondary consequence of its work in increasing the marketability of the securities in which it deals. This increased marketability strengthens the position of individual business men, for it enables them in time of emergency to borrow readily on the security of their investments; and it strengthens the position of a country as a whole, for it enables the negotiable security to be used as a means of making international payments during periods of difficulty arising from such causes as an adverse balance of trade or the exaction of an indemnity.

CHAPTER XXXVII

SPECULATION ON THE LONDON STOCK EXCHANGE

IN order to estimate the social importance of any productive operation it is necessary to make a distinction between that direct product from the sale of which the entrepreneur defrays his expenses of production, and those indirect effects, incidental to the operation, which fall upon society at large. These incidental effects associated with an undertaking may be good or bad; on the one hand, the extension of a tramway system may increase the value of the land through which it runs; on the other, the construction of a chemical factory may lower the rents of buildings in its neighbourhood. In so far as such effects do not enter into the calculations of the entrepreneur, they must be separately estimated and their value added to or deducted from his direct net contribution in order to find the social importance of his operation.

In the operation of an ordinary business, let us say a parcels delivery company, it is easy to distinguish between the direct service of transport, from the sale of which the company draws its profit, and those incidental effects, important in social if not in individual accounting, which arise from the deteriorating influence of the occupation on the industrial capacity of the van-boys employed. In the operation of the speculator these various effects are far more obscure, and the essential nature of the operation is itself not readily distinguishable. It will be convenient, therefore, to apply to the work of the speculator those criteria by which the social importance of industrial operations generally may be estimated. By so doing we can bring this work under the general analysis of productive operations, distinguish the essential nature of the speculative service, *i.e.* its direct product, and make some estimate of the incidental effects which accompany the operation.

The view adopted here is that the direct product of a speculative operation, that is to say, the service which the speculator in effect sells to the public and from which he draws his profit, is an act of trading through time; and that the most important indirect effects incidental to this operation are (1) the effect which he produces on the level of prices, and (2) the deteriorating moral effect of the occupation on the parties concerned in it.

These criteria will be examined in that order. As they stand they form a comparatively simple analysis. But the good and evil effects arising from speculative operations are intermingled very finely; they vary within these main groups in accordance with minor causes; and the distinction to which they seem to correspond most closely is that between the skilled and the unskilled speculator. The matter is therefore complicated a little further; for each of these main criteria must be considered first in relation to the speculator who is able to some extent to anticipate the future, and secondly to the speculator whose operation is based rather on temperament than knowledge.

Before taking up the main argument let us consider for a moment the environment in which the speculator operates. To do so involves a repetition of what has already been repeated; but in so complicated a matter as this it is perhaps more inconvenient to make a simple reference to the argument of a previous chapter than to restate that argument briefly in a manner which brings out the points most essential to the present discussion.

We are concerned primarily with speculative operations in the market for negotiable securities, a market which consists of two parts; the first deals with the creation and sale of new securities and links capitalists and entrepreneurs; the second deals with these securities at a later stage and consists simply of facilities by which these old securities are interchanged among capitalists.

It may be noticed that in the first part of this market the speculator acts to some extent as an unpaid underwriter. He operates as a "stag," buying the shares of, let us say, a new joint-stock company in the hope of selling them at a profit at a later date. It is true, more especially when working with borrowed capital, that his prospective sales form an element of weakness in the market for these shares and may cause damaging fluctuations in their price; and, indeed, special devices are sometimes adopted to exclude him from participation in new issues (cf. p. 198). Nevertheless, his initial purchases must in many cases yield a service to the market inasmuch as they enable the company to obtain more easily the capital which it is seeking. However, the point is an unimportant one and need not be pursued further. Henceforward we need to concern ourselves only with the work done by the speculator in connexion with the securities already issued to the public, *i.e.* to the old securities dealt with by the Stock Exchange.

The work of this second part of the market, the Stock Exchange, consists simply in making securities more readily marketable.

It gives rise, therefore, to a twofold economy. By facilitating the purchase of securities it tends to increase both saving and investment, and consequently draws into the market increased quantities of the capital held by the public. By facilitating the sale of securities it relieves capitalists who buy *new* issues from those risks which would otherwise arise from their inability to recover their capital at a later date should they wish to do so; in this case also, therefore, it increases the quantity of capital available for production or other uses. The point to notice—the only point which this repetition is intended to emphasize—is the fact that every increase in the efficiency of the Stock Exchange may be expressed objectively as an increased marketability of stocks and shares, as an additional utility imparted to these stocks and shares, which reacts on the supply of capital, lowering its costs of production and consequently its supply price.

With this point in mind we may pass on to consider the direct product of the speculator.

CHAPTER XXXVIII

THE DIRECT PRODUCT OF THE SPECULATOR

IF the operation of the speculator is to be brought into line with that of any other production process it is essential first to distinguish his net product, that is to say, the service which he produces and which society buys from him.

It seems clear that the operation of the speculator is closely symmetrical with that of the trader, and that in each case it consists essentially in an act of transport. The typical work of the trader is to buy goods in one place, carry them (or the title to them) and sell them to people situated elsewhere. His operation consists essentially, therefore, in an act of transport between two points of space, bounded at one end by a purchase and at the other by a sale. Similarly, the typical undertaking of the speculator is to buy goods from people at one time, carry them and sell them to people at a later (or earlier) date. His operation may be said, therefore, to consist essentially in an act of transport between two points of time, terminated by a purchase or a sale. It is true that in the sale of options and in some transactions on the Produce Exchange, his work is narrowed down to the bearing of risk, and that in deliberate manipulation his operation is widened to include a calculated disturbance to prices; but these instances need not prevent our adopting his typical operation as the basis of the argument.

It does not follow that anyone who buys and sells between two points of place or time is by that fact a trader or speculator. That would be the case only if the purchase and sale were bound together in one operation undertaken for the purpose of profit. When, for example, a person buys railway stocks for the interest they yield him, holds them and finally sells, market language classes him as an investor. If, however, he had undertaken the operation in anticipation of a profitable difference between the buying and selling price, market language would usually class him as a speculator. It is not entirely satisfactory to let the distinction turn on a question of intention; but such a course is, perhaps, better than its alternatives. We may, therefore, define the speculator as one who carries between two points of time with a view to profiting from a price difference between the two exchanges bounding his operation.

This operation of carrying is the essential part of the speculator's work whether on a Produce, or a Stock, Exchange; but the public advantage to which this operation gives rise appears in the two markets in a somewhat different form. When speculators on a Produce Exchange carry cotton during the interval between the dates of harvest and manufacture, they relieve farmers and manufacturers of risks which these parties would otherwise have to bear themselves. They specialize in risk-bearing; in effect, they sell their service to farmers and manufacturers in exchange for an anticipated price difference; and they do so at a price which is less than that at which these parties are prepared to bear those risks themselves. The main advantage from their operations consists, therefore, in relieving the industry of risks arising from fluctuations in the price of its material. Identical operations carried out on the Stock Exchange yield an advantage which is most conveniently expressed in terms of an increased marketability of stocks and shares.

The Stock Exchange, like any other market, is an arrangement for establishing business contact between buyers and sellers distant from one another. In a local market this contact is usually made by the personal attendance of parties wishing to buy and sell. But in a central market like the London Stock Exchange this business contact is established by operations carried out by intermediaries, the professional dealers in the market, who join loose ends, as it were. The trading operations carried out by these dealers link buyers and sellers separated by space; their speculative operations link buyers and sellers separated by time. These two kinds of operations (in practice usually one) are the threads binding together a market extended in space and time; they form the warp and weft of the market, the actual material of which it is composed. The direct effect of these operations is to enable people to buy and sell more readily and conveniently; an effect which may be interpreted in terms of an increased marketability of securities; in terms of a net gain in utility due to the transfer of securities from people who do not want them to people who do; or, finally, in terms of a reduction in the supply price of capital. In the same way, therefore, as an increased utility of goods is the expression of a manufacturing process, or of the work of the merchant who distributes them among people at different points in space, so the operation of the speculator on the Stock Exchange increases the marketability, and, therefore, adds to the utility of stocks and shares by facilitating their distribution among people at different points in time. We may, therefore, define his direct product in terms of this increased marketability.

It may be true that the operation of the speculator necessarily yields an advantage to the public; but it has still to be determined whether this is necessarily a *net* advantage, that is to say, whether or no the profit which he obtains is less than the value of his product.

Take first the case of a trader who buys goods from A, carries them elsewhere and sells them to B, drawing a profit from the price difference between the two exchanges. If the exchanges at each end of his operation are free and intelligent, the facts show that the goods received by B were of greater value to him than the money he paid in exchange for them—greater, therefore, than the trader's profit plus the price for which A willingly parted with the goods. It follows, therefore, that the transfer of goods effected by the trader's operation necessarily increased their utility by an amount greater than his profit, *i.e.*, that the operation necessarily yielded a *net* social benefit.

It appears at first sight that the operation of the speculator, bounded at each end by a free sale, corresponds to that of the trader and accordingly must also yield a social benefit. The two kinds of operation are of course closely symmetrical, but the fact that the one involves an interval of space and the other an interval of time introduces a difference which is of great importance in determining whether or no the speculator's operation yields a net benefit to society.

The essence of the matter lies in the fact that in the one case the value of the goods dealt in is fairly easy to estimate, and that in the other it is estimated only with great difficulty. The trader is concerned primarily with the *present* value of goods. The party with whom he deals has no great difficulty in estimating their value in relation to his present wants. Ordinary knowledge and ordinary intelligence are usually sufficient to ensure that his exchange yields him a balance of advantage. The expert knowledge of the trader may give him some opportunity for deception and, in a few classes of goods, considerable opportunities; but in general bargaining knowledge is sufficiently equal to ensure that each obtains an advantage from his deal.

Contrast with this the position of the speculator. Inasmuch as he operates between the present and the future, it is essential that he should form some estimate of the future value of the goods in which he deals. If the speculator and the parties with whom he deals all have equally good knowledge of this future value, the speculator is in the same position as the trader, and it is in general impossible for him to draw a profit from his operation greater than the money value of the utility which it adds to the goods.

In fact, however, ordinary knowledge and ordinary intelligence are very inadequate in forming an estimate of this future value; skill, experience and particularly inside knowledge will often disclose prospective values very different from those suggested by ordinary knowledge; and this special intelligence may be employed as a means of abstracting wealth from those who are less well informed.

In order to bring out the point more clearly let us suppose that an official of a joint-stock company knows that his company is about to declare an exceptionally high dividend. This official can then operate as a skilled speculator; he may buy shares in the company, wait until his special knowledge has become public and then resell his shares at a profit. His operation yields an advantage to the general public; for it has in effect brought together the party from whom he bought and the party to whom he sold, enabling them to deal with less difficulty and delay than would otherwise have been the case. Had the knowledge of these two parties been equal to that of the speculator, the payment which they made for this facility would in general necessarily have been less than the advantage they received. But in fact the superior knowledge of the speculator enabled him to abstract from them a profit out of any relation to the value of the service which he rendered.

In general, when the exchanges constituting the framework of a production operation are free and intelligent, the operation necessarily yields a net economic contribution. In the operation of the speculator this natural safeguard breaks down owing to the difficulty of estimating the value of the commodity which is the subject of exchange. There is, therefore, no *a priori* assurance that the operation yields a *net* advantage to society. The question can be answered only by reference to the facts—by determining in each case whether or no the speculator exercises bargaining knowledge superior to that of the party with whom he deals.

In any market where speculative activity is unchecked, an evil which arises solely from unequal bargaining knowledge can be met only by redressing the inequality of knowledge on one side or the other. In fact, the organization of markets tends both to strengthen the position of the public and to weaken that of the market experts with whom, directly or indirectly, they deal. In the wholesale markets for such commodities as wool, tea or sugar, the expert knowledge of sellers is neutralized by the employment of expert buyers. In more speculative markets where the public participate directly, the more effective safeguard is found in the latter condition—the condition in which the pressure of expert competition is engaged to force prices into conformity with the best-informed anticipations of the market; as, for example, in an organized Produce Market the whole information at the disposal of the market is expressed from moment to moment in the price of the commodity.

It must be noticed that the effect of competition in speculative price-making is of more than ordinary importance. Defective competition in trading operations rarely does more than diminish the net gain of utility which accrues to the public; it may require the consumer to pay a higher price, but it cannot usually make him pay a price in excess of the utility to him of his purchase. Defective competition in speculative operations, on the other hand, may frequently result in this net gain being converted into a large net loss.

The manner in which this safeguard operates on the London Stock Exchange will be taken up in the following chapters.

CHAPTER XXXIX

THE SPECULATOR'S PROFIT

AS there is no *a priori* assurance that the profit of the skilled speculator is confined within the value of the service he supplies, it becomes necessary to consider how far in fact the organization of the Stock Exchange protects the public from his depredations by limiting his power to profit by the exercise of superior bargaining knowledge.

The general presumption that the superior knowledge of the skilled speculator enables him to exploit the public gives considerable justification to the established prejudice against speculation. As, however, this prejudice—or at any rate a prejudice resting on this ground—does not extend to the work of the Jobber, whose operations are essentially speculative, it seems likely that the organization in which the Jobber works is such that it enables society to obtain the advantage of his speculative operations while preventing him from using his superior knowledge to obtain a payment in excess of the value of his work. Let us then begin by examining the situation of the Jobber.

The functions of the dealer on foreign markets are carried out on the London Stock Exchange by two distinct parties, the Broker and the Jobber or Dealer. The Broker is the expert agent of the public. His skill and experience enable him to advise clients with regard to the transactions which they undertake and to put his clients on equal bargaining terms with the Jobber in carrying out those transactions. He serves in effect as a kind of ring fence round the Jobbers, protecting the public from contact with dangerous machinery—dangerous, of course, not from any moral weaknesses on the part of the Jobbers, but because the superior knowledge of the value of securities possessed by these experts would in many cases place the public at a disadvantage in dealing with them directly. The familiar operations of the " bucket shop " show how easily an unscrupulous dealer can take advantage of his superior knowledge of securities when dealing directly with the public.

The Jobbers, who form the majority of the members of the Stock Exchange, are not agents like the Brokers, but principals. They carry out the trading and speculative operations which actually constitute the market in securities. It is their business to buy or sell any negotiable security on demand and to "carry" during the interval which elapses before they are able to "undo" their deal by a further and contrary transaction with some other party. They constitute, therefore, the core and centre of the market; and through their hands every transaction passes.

It has already been stated, perhaps too frequently, that the direct service of every speculator on the Stock Exchange appears in the form of an increased marketability of securities. This is most obvious in the case of the Jobber; and the fact that this direct service is sold to the public like any other is also most obvious in his case, inasmuch as the price at which he sells this marketability is much more clearly defined than in the case of other speculative transactions.

When a Jobber is asked by a Broker at what price he will deal in any particular security, he is usually prepared to quote two prices at one of which he is ready to sell, and at the other to buy, a reasonable quantity of the security in question. The difference between those two prices, the Jobber's "turn," represents of course the price of his service, the payment which he requires for the trouble and risk involved in completing the first deal, in bearing the risk of fluctuation of price during the interval which elapses before he can undo his bargain and in completing the subsequent deal. The main question to be answered is whether the general circumstances surrounding the Jobber restrict the amount of this turn within the value of his service. But before taking up that question, something must be said as to the costs of the Jobber's service and the effect on these costs of general market conditions.

The main cost of the Jobber's work must evidently be that of dealing with the risk of price fluctuation during the interval between his purchase and his sale. He may bear this risk or destroy it, in part at least, by anticipating the movement of prices.

In an organized speculative market for such produce as wheat the work of forecasting the future course of prices is doubtless of great importance. The market is called upon to carry wheat for a considerable part of the period between harvest and consumption; and the course of prices, apart from "corners" or "squeezes," depends mainly upon calculable data, such as estimates of production and consumption. In consequence, professional operators will often set up elaborate arrangements for anticipating future prices, and the cost of undertaking risk becomes in a considerable degree the cost of destroying it.

On the Stock Exchange the interval through which the Jobber is called upon to carry securities is of course far shorter; and, at the same time, the influences governing price movements are less calculable. Nevertheless, the fact that each Jobber specializes in a narrow range of securities shows that his work does not consist merely in bearing risk but also in destroying it.

The distinction is not, however, a particularly useful one. The main points of interest are the influences which determine the amount of risk falling on the Jobber during the interval which he is required to bridge. Evidently the more active the security in which he is asked to deal, the shorter is the interval during which he has to carry, and accordingly the closer the two prices he quotes and the smaller his turn. On the other hand, the more uncertain the fluctuation of prices which may occur during this interval, the wider the two prices he must quote and the larger his turn.

The larger the *amount* of any kind of security dealt in, the more active, of course, is its market likely to be. But apart from this, the main influence narrowing the Jobber's interval must arise from the optimism and the pleasurable excitement of risk-bearing —that is to say, the pleasurable anticipation of profit which causes the amateur speculator to dabble in certain kinds of stocks and shares, thereby making an active market in them, and doing so in many cases for a very low payment, but more usually even at a positive loss. It is not suggested that either optimism or the pleasures of risk-bearing affect the seasoned Jobber directly. But they certainly affect him indirectly—inasmuch as they result in the amateur speculator gratuitously making an active market, which narrows the interval to be bridged by the Jobber and consequently reduces the amount of his turn.

The effect of the operations of the amateur speculator on the size of the Jobber's turn is partly set off by the fact that amateur speculation may increase the uncertainty of price movements and consequently increase the risks falling on the Jobber during the interval through which he carries. This "indirect" effect of speculation on prices is discussed in a later chapter and need not be considered here in any detail. Moreover, it seems tolerably certain that the influence of speculation by the public is much more important in narrowing the interval through which the Jobber has to carry than in increasing the risk falling on him during that interval; *i.e.* that its net effect is to reduce the work to be done by the Jobber. However, there is no need to balance these two effects now; to do so is to anticipate a more complicated sum to be done in a later chapter. At the moment the conclusions required are these.

The Jobber's costs depend on the length of the interval which he has to bridge and on the uncertainty of price movements during that interval. The length of this interval is reduced by the operations of the speculating public; and it may be noticed that the direct product of these operations appears, in the special circumstances of the London Stock Exchange, in the form of a reduction in the Jobber's costs—in reducing the price at which he imparts marketability to securities. The Jobber, relieved in this way of part of his work, carries out the remainder in exchange for his "turn." Finally, this turn plus the Broker's commission is the price which the public pay for the enormous advantages arising from the immediate marketability of securities.

This outline of the organization in which the Jobber works is a preliminary to dealing with the question of whether this organization ensures that the Jobber's special knowledge of the commodity in which he deals is not employed to obtain a payment in excess of the value of the service which he renders.

The organization permits no member of the public to deal direct with a Jobber. There must in every case be an intermediary, the Broker, one of whose functions is to act as an expert agent, buying and selling on behalf of the public, and enlisting the forces of competition in their protection. Not only, therefore, are the Jobbers in keen competition with one another, but this competition is quickened by the Broker, whose interests are those of his client. But the Jobber is more highly specialized than the Broker, and even this measure of protection may be insufficient. Accordingly, there is the further provision that before a Broker discloses himself as a buyer or seller of any security Jobbers most usually quote two prices, one at which they will buy and another at which they will sell a reasonable quantity of the security in question.

The organization of the market, therefore, has a twofold effect. On the one side it increases the bargaining power of the public by providing for the intermediation of the Broker; and this is supplemented by the publication of a daily Official Price List and a vast amount of information issued by specialized financial journals. On the other hand, it provides for the keenest competition on the part of the Jobbers, and consequently compels them to quote prices which disclose their anticipations with regard to the movements of prices in the near future. The dealings of the Jobber with the public are, therefore, hedged about by the market with so many safeguards that it seems safe to conclude that the Jobber in the ordinary course of his business has little or no opportunity of employing his superior knowledge to extract a profit greater than the value of the service he renders.

It must, however, be remembered that the organization of the London Stock Exchange is fixed by formal regulations laid down by its committee, and can be varied by individual members only within the limits imposed by these regulations. The value of an arrangement, therefore, by which every transaction passes through the hands of the Jobbers is affirmed by the opinion of a majority, and not by its maintaining itself against the continuous pressure of alternative methods. Accordingly, although it has been shown that the Jobber has little opportunity of employing superior bargaining knowledge to increase his profits, it cannot be definitely proved that this profit is necessarily less than the value of his service. It is conceivable, for example, that if the regulations maintaining the separate existence of Jobber and Broker were abolished, the costs of marketing might fall. On the whole, however, it seems to be a very safe conclusion that the operations of the Jobber yield a *net* advantage to society, and it is a matter of small surprise that these operations are rarely classed as examples in the account of the speculator's iniquities.

CHAPTER XL

THE SPECULATOR'S PROFIT (*continued*)

IN the last chapter it was found that, owing to the organization of the market, the Jobber bargained on practically equal terms in his dealings with the public, and that consequently his profits were not unduly increased by the exercise of superior bargaining knowledge. In this chapter we have to consider to what extent other skilled speculators are able to obtain profits in excess of the value of their service by the use of superior knowledge in their dealings, through the Jobber, with other members of the public.

The Jobber, though legally a principal, is economically an intermediary, and a complete transaction on the Stock Exchange includes both parts of the operation by which a security passes from the ownership of one member of the public, through the hands of the Jobber, into the ownership of another member of the public. As one of these members may himself be a speculator, the two real principals may have very unequal knowledge of the securities in which they are dealing. The question under discussion, therefore, is that of the measure of protection which the organization of the market affords to the one party against the depredations of the other.

It seems doubtful whether the information furnished by the press protects the public from itself to any great extent; for that information is just as likely to afford special opportunities to the expert speculator as it is to make up deficiencies of knowledge on the part of others. It may raise the general level of knowledge, but it seems unlikely to level differences in knowledge—still less in the ability to apply it. The Broker is no doubt an important safeguard. Were the public to rely more upon his advice they would place themselves on something like equal terms with the expert with whom in effect they are dealing.

Some measure of protection is undoubtedly given by the Jobbers through whose hands all transactions must pass. If, for example, some alert and speculatively inclined man of affairs endeavours to anticipate the public appreciation of some favourable news by buying the stock affected by this news, he will often find that this favourable effect is already anticipated in the quotation of the Jobber; or, in other words, that the alertness of the Jobber prevents him from employing his superior intelligence against the remote party from whom he would have bought that stock. But when we have subtracted, as it were, the knowledge of the Jobbers from the knowledge of well-informed speculators among the public, there will still remain to these speculators many opportunities of using their special knowledge for the purpose of transferring wealth from the public to themselves.

The tale goes that the fortunes of the Rothschild family were founded by a successful operation in Consols based upon early intelligence of the results of the battle of Waterloo. The Rothschild who carried out this operation, having obtained the earliest news of the victory, bought large quantities of the stock, held it until the news became generally known, and then sold it at a handsome profit. Apart from its effect on prices, the public gain from this operation consisted in the advantage which certain people obtained from rather greater facilities for selling their Consols, and from the similar advantage which another group of people enjoyed a few days later from somewhat greater facilities for buying. As, however, the former group of people sold a commodity of a value far greater than they imagined; that is to say, as the exchanges bounding the speculative operations were vitiated by unequal knowledge, the public paid over to the speculator a price which was out of all proportion to the value of his service. The deal was in all essentials similar to that operation which is occassionally associated with the practice of lynch law, the operation, namely, of buying a defective horse in a neighbourhood where his defect is common knowledge, and selling him in another neighbourhood where his defect is unknown. There is, it is true, this important difference between the two cases, that opinion would as generally condemn the one transaction as dishonest as it would regard the other as a fair example of business enterprise.

The Rothschild transaction is a type of many which the intermediation of the Jobber fails to make innocuous. It seems to be true that deliberate manipulation by strong financial interests is of small importance on the London Stock Exchange. The following extract from Mr. Hartley Withers' *Stocks and Shares* (pages 291–2) may serve, therefore, as a text for discussing the typical effects of skilled speculation. "In fact, it may be said that this is the normal course of events in market movements that are accompanied by speculation—that speculators, generally of the professional and well-informed class, anticipate good or bad news by purchases or sales, and close their commitments when the good or bad news arrives and produces buying by investors or sales by holders, while at the same time there is often an aftermath of speculative buying in the case of good news, by members of the outside public, which more often than not loses its money by coming in too late, or, in the expressive Doric of Throgmorton Street 'gets landed at the top.' "

The typical expert speculator may be taken, then, to be of " the professional and well-informed class." He accordingly includes the Jobber. But this fact need not invalidate the argument of the previous chapter; for it seems quite reasonable to distinguish the Jobber in his ordinary work of making a market in response to the public demand to buy and sell, from the Jobber in his capacity as a skilled speculator initiating operations in the same way as any other party in possession of special knowledge. As the term " expert " speculator is used here to mean simply one who deals in the light of special knowledge, the class must be taken to include that numerous body of people whose business or personal connexions with the management of joint-stock companies and with people of expert knowledge in particular securities enables them to obtain better or earlier information of the prospective movements of particular stocks than the outside public. Many of these people are able to profit almost without effort merely by being in the swim. Many others, such as the management of Trust Companies and other well-informed speculative investors, may spend much time and trouble in dealing in securities whose prices, for some reason or other, are not in accordance with their prospects. But the special information, whether obtained by good fortune or hard work, serves equally as a means of abstracting wealth from others who are less well-informed.

" When the good . . . news arrives and produces buying by investors . . ."—when this has been done, the real principals, the investing members of the outside public, have completed their indirect deals with one another. The transfer of the securities from the one to the other has been facilitated by the action of the skilled speculator, for his operations have narrowed the Jobber's turn; but in the course of this transfer he has abstracted a large share of the price difference, and his profit will be out of any relation to the services he has rendered. Apart from its effect on prices, special information employed in this way has no social value.

Again, if there is " an aftermath of *speculative* buying " by the public by which the value of the securities is forced above their investment value, the expert speculator who is in a position to appreciate this fact may undertake a bear operation which yields him a further profit at the expense of the public. In a single price wave, therefore, he is able to transfer wealth to himself both from the investing and from the speculating public. But the social effects of this latter operation are not necessarily bad. When the ill-informed optimism of the public produces a speculative boom in some security and temporarily forces its price well above its investment value, the course of that price movement inevitably results in a considerable transfer of wealth among the parties who participate in it; and if participation were confined to the speculative public a large number would be likely to make considerable profits and consequently to be encouraged to take part in further operations of a similar character. The participation of the expert speculator is likely to diminish this encouragement by enabling him to absorb a large part of these profits himself; and the toll which he levies may be more than set off by the instruction he imparts. In so far as he encourages the boom his action is socially harmful; but in so far as he taxes the dabbler in speculative securities, or operates as a bear and so checks the rise in prices, his action may be socially beneficial.

Apart, therefore, from the expert initiation or encouragement of booms, the superior intelligence against which protection is especially required is that of the speculators who are able to anticipate movements in the investment values of securities. It is clear that the value of items of inside information which are confined to only a few parties cannot be eliminated by the pressure of their mutual competition. Nevertheless, the presence in the market of other alert and experienced speculators, in particular the Jobbers, must do a great deal to ensure that the operations in which it is sought to make this exclusive information effective for profit serve also to publish it in the market.

The employment in this way of inside information is, of course, limited to some extent by the general sense of the community. A general sense of what is right and proper prevents a politician from using on the Stock Exchange special information obtained by virtue of his office; and the same feeling, reinforced by other considerations, deters the directors and officials of joint-stock companies from speculating in the shares of their own or allied companies. But while the use of inside information obtained by virtue of official position is usually condemned, the employment on the Stock Exchange of similar information obtained in other ways conforms so closely to ordinary business operations that the moral sense of the community condemns the one no more than the other.

There is no need, however, to deal with the employment of superior bargaining knowledge as a question of morals. It is sufficient for present purposes to consider its effects on the well-being of society. In these terms the conclusion of the present chapter is platitudinous enough. It is that there are considerable numbers of expert speculators who, in effect, deal through the

Jobber with less well-informed members of the public and use their superior knowledge of securities or of the moods of the public to transfer wealth from these other parties to themselves. The unskilled speculators and investors with whom they deal obtain some protection from the Jobber, and can, if they choose, obtain almost complete protection by acting only on the advice of a competent Broker; but the facts show that they do not avail themselves fully of this safeguard. In so far as the expert speculator levies his toll from the speculating public without still further exciting their activities his operations are not without some advantage to society, for they tend to discourage the public from a form of enterprise which can rarely yield any net social advantage. In so far as he deals with investors he takes from them the advantage of price movements without giving any adequate return, and the *direct* effect of his operations is a net social loss.

CHAPTER XLI

THE INFLUENCE OF THE SPECULATOR ON PRICES

THE previous chapters have been wholly concerned with the direct effect of the speculator's operations in reducing the cost of buying and selling securities. The present chapter deals with the indirect effects of his operations on their price level.

The influence of speculative operations on price is indirect in the sense that its good and evil consequences are not taken into account by the speculator; they fall not on him but on society at large. The regulation of price is not a matter which society entrusts to the speculator by making his profit dependent on its performance. It is true that Governments and other bodies occasionally make speculative purchases with the direct object of maintaining the prices of the securities they have issued; and, further, that prices may be deliberately manipulated, by the spread of false rumours and in other ways, as a necessary prelude to profitable speculative transactions. In such cases the action on prices is an essential part of the speculative operation and must be so included. In the typical case, however, the operation of the speculator—that from which he draws his profit—is simply an act of trading between the two prices. The good or evil effects of this operation on these prices are incidental consequences of this act—consequences closely analogous to the good or evil effects of a manufacturing process on the workpeople engaged in it. Neither the speculator nor the manufacturer is paid for producing these incidental results; accordingly these results must be separately estimated and added to or subtracted from the value of the direct product.

In any community where economic activities are adjusted by individual initiative and not by any central controlling authority, price has important functions; for it serves as an index which regulates on the one hand the output, and on the other, the consumption of particular commodities. "True" prices (cf. p. 226), therefore, co-ordinate production and consumption; prices varying from the true level lead to maladjustment and waste. In the Securities Market industrial stock is the commodity with which we are concerned; and the parties corresponding to the producer and consumer are those who issue this stock and those who buy and hold the shares. It may be expected then that the maintenance of true prices for industrial stocks will have some influence in regulating on the one hand the output of business undertakings and on the other the absorption of their stocks by the public. Further, as the remote effect of true prices increases the utility of, say, wheat to the consumer, so, it may be expected, will true prices for securities increase their utility to the investor. Without arguing the matter in detail it seems reasonable to make the following three statements:

> Speculative activity which drives price considerably above investment value unduly encourages the issue and purchase of new securities and accordingly produces waste;
>
> Speculative activity which forces price away from investment value increases the risks both of buying and holding securities;
>
> Speculative activity which makes prices more variable probably repels the investor by increasing his risks, but is likely to attract further speculators;

and to use these as criteria for estimating the good and bad effects of speculation on prices.

Let us now bring these conceptions into touch with the actual facts of the market. The Stock Exchange, though a single market in so far as it facilitates the exchange of money and securities, is more properly regarded as a group of interconnected markets (cf. p. 223); the actual number being reckoned as the number of groups of specialized Jobbers or as the number of different kinds of securities; the latter being probably the more convenient for the present argument. Each market has a large measure of independence determined by the characteristics of the security itself and the circumstances and temperament of the particular part of the public who deal in it. At the one extreme is the market in a security whose value is naturally variable or indefinite; here is the natural home of the unskilled speculator. At the other extreme is the market for the solid investment stock which the public enters only as an investor. Between the two is an indefinite range of markets in which the public appear in characters intermediate between those of the speculator and the investor.

There are two circumstances which are likely to affect speculative price-making in these markets. In the first place, it seems probable that the amount of speculation on the London Stock Exchange is increased by the comparatively long interval between settlement days; inasmuch as the speculator is enabled to operate during this fortnight without being called upon to hand over either securities or capital.[92] It is true that on the New York Stock Exchange where daily settlements are the general rule, speculative activity is even greater than in London; but this objection is far from conclusive, as the shorter interval for settlement is evidently only one of many differences between the two markets. The influence of shorter settlements on the New York market in curtailing speculative activity is no doubt largely neutralized by exceptional facilities for "carrying over" due to the lack of a developed discount market and the consequent tendency of banks to employ their short money mainly in financing Stock Exchange operations. The huge scale on which such facilities are provided in London is suggested by the fact, already noticed, that in October 1914 the London Stock Exchange owed outside financial institutions (no doubt mainly the banks) no less than £81 m. Nevertheless, it seems to be only reasonable to suppose that a considerable number of the speculative public who now dabble in gold mines or rubber shares would cease to do so if the settlement were a daily one and they found it necessary to support each speculative purchase by borrowing from a Banker or Broker.

But whether or no the amount of speculation is much increased by the practice of a fortnightly settlement there can be little doubt that the effect of speculation on prices is considerably influenced by the fact that the public, by acting mainly on one side of the market, disturb the balance of power as between the bulls and the bears.

The available quantity of any security or of any kind of produce is definitely limited, whereas the available quantity of money, against which this security or produce is being traded, is practically unlimited. It follows, therefore, that a person who sells in anticipation of a fall in prices runs much greater risks of being "squeezed" than the person who buys in anticipation of a rise; for the "bear," when he sells, contracts to deliver part of a limited supply which may be unavailable when he comes to buy, whereas the "bull" contracts to deliver money which is practically always available at a price. The fundamental facts of the market, therefore, already give the bull a predominance in the market, and this predominance is reinforced by the persistent habit of the public of operating mainly on the bull side. This inequality is met in part on Produce Markets by allowing sellers to deliver other grades of produce than that in which they trade, at a fixed difference in price. But Mr. Brace, writing of the American market in his book on *Organized Speculation*, gives it as his opinion that, in spite of this device of increasing the number of grades of wheat which are a good delivery, the bull side of the market is distinctly stronger than the bear. The bears, he thinks, are able occasionally to force prices down to what one may call the "true" value of the wheat; but, he says, this level is the minimum, the base from which prices are continually being forced upwards by the bulls. The unequal forces on the two sides of the markets result, therefore, in average prices being markedly higher than would be justified by statistics of production and consumption. If this result occurs in a market where the bears have such a vast supply from which to make delivery it seems likely that the same cause acts even more strongly on the Stock Exchange where the amount of any one security is strictly limited. It seems, at any rate, to be a safe inference that the average prices of speculative securities are maintained at a level appreciably higher than their investment values.

The general circumstances of the market are such then that the amount of public speculation is probably increased by a fortnightly rather than a daily settlement, and is certainly increased by the ease with which capital may be borrowed for carry-over purposes both from Stock Exchange firms and directly from the banks; and that the effect of this speculation by the public is, in general, to drive the prices of speculative securities above, and often far above, their investment values.

These general market influences affect mainly the inexpert speculating public; a sharp distinction is necessary between the effect on prices of this kind of speculation and that resulting from the operations of the skilled speculator. The skilled speculators, as the term is used here, are those who have better knowledge of the future price movements of securities than the general public with whom, through the Jobber, they deal. Now in the greater part of the investment markets, that is to say, in the markets for securities not liable to speculative booming by the unskilled public, these price movements are determined mainly by changes in investment values. Accordingly the opportunity for profitable speculative dealings in these markets lies in bull or bear operations designed to anticipate changes in investment values; and such operations carried out in the light of superior knowledge necessarily tend to move the prices of securities into closer approximation to these investment values. It seems quite safe to conclude, therefore, that the effect on price of skilled speculation in the investment markets yields a net advantage to society; for though these operations may increase the variability of prices they maintain them at a truer level, and their net effect must almost certainly be to reduce the investor's risks both in buying and in holding securities. The total effect of this kind is very considerable, for very large amounts of capital are controlled by experts and shifted from one security to another in accordance with anticipated changes in their investment values. Trust

Companies alone control more than £100 m.; and there must be added to this the investments of banks and Insurance Companies, the capital owned or borrowed by professional and well-informed speculators in close touch with the market, and even that of the speculative investor who, with the assistance of his Broker, buys securities whose values are temporarily depressed by extraneous circumstances. This continuous movement of capital under expert speculative control may yield to those who move it profits much in excess of the direct value of their operations in increasing the marketability of securities. But its incidental effects on price must result in a very substantial advantage to society, by reducing the risks of investment and consequently lowering the supply price of capital.

Turn now to a market in which prices are determined mainly by the unskilled speculative public and where the operations of the skilled speculator are based rather on his anticipations with regard to the moods of the public than on prospective changes in the investment value of the security. This may be the market for the shares of a copper mine or a rubber company or the ordinary shares of an industrial enterprise on which are concentrated most of the risks of the undertaking. Suppose that some favourable report is published dealing, let us say, with a prospective increase in the demand for copper, and that professional speculators on the Stock Exchange undertake bull operations in copper shares with a view to giving prices a lift, bringing in the public and unloading their shares later at a handsome profit. In these circumstances it may quite well happen that the public come in heavily and drive the price of the shares temporarily to a price far above their investment value. The rising price index acts on copper shares as on any other commodity; it operates as a sign to the company promoter, calling into being a number of new business undertakings for the production of copper, and as a sign to the public to buy the shares of these undertakings as they are issued. Moreover, it is likely to call into being not only an excessive number of companies for producing copper but also a number of companies whose main purpose is to transfer wealth from the public to the promoters. The end of the boom is probably anticipated by profitable bear operations on the part of the skilled speculator; and as, in the general collapse, the price of the shares of sound companies will almost certainly fall below their true value, he has yet another opportunity to profit at the expense of the inexpert public. The net result of this outburst on the part of the speculative public is likely then to be that a large amount of wealth has been transferred from them to the skilled speculator and the company promoter; that the copper-producing industry has been disorganized; and that the public are left in possession of large numbers of copper shares which will yield them perhaps an average of less than 1 per cent on their capital.

It does not follow that the public should not participate in these speculative markets; on the contrary, it is clearly in the social interest that capital should be supplied to risky ventures in order that industrial experiments may be initiated and industrial opportunities developed. But the capital should be supplied in conformity with prospective yield. A risky venture has an investment value of a kind. It offers a set of prospective net returns ranging perhaps from a large negative to a large positive yield. If the actuarial value of that set of returns is not less than the net rate of interest plus a reasonable payment for the uncertainty of the yield, then that venture has a social claim to be supplied with capital; that is to say, it would be to the economic advantage of society as a whole that the venture should be provided with the capital it requires. In point of fact, however, the unskilled investing public have neither the power nor the will to make a good estimate of the investment value of such a security. A wide range of prospective net returns is more likely to touch their imagination, make them highly susceptible to suggestion and lead to herd action which results in an overvaluation of the security accompanied by wildly fluctuating prices. Consequently production is periodically disorganized; the industry is supplied with capital in excess of its social claim; and, the organization of the market being what it is, a large part of the capital provided by the public is transferred into the hands of the company promoter and the skilled speculator. In the highly speculative markets, therefore, the influence of the unskilled speculator is to force prices away from investment values and by increasing their variability to encourage further speculation, this twofold effect leading to heavy social waste. In so far as his operations extend to securities which are more in the nature of investments, his influence is in a similar direction. His lack of knowledge and his financial weakness both tend to increase the uncertainty and the variability of prices, and both, consequently, tend to increase the risks of the investing public. The main conclusion of this chapter may be summed up in four statements. They deal only with the speculator's influence on the price of securities.

1. Speculative operations in which special knowledge is employed to anticipate changes in the investment values of securities not subject to speculative booms establish a truer course of prices and consequently increase the efficiency of the market.

2. Skilled speculative operations in markets for securities of variable and uncertain value are ambiguous in their effects. On the one hand, they tend definitely to distort prices when they are employed to initiate or foster a speculative boom; on the other

hand, they correct the false valuations of the public when they are employed, for example, in bear sales during a boom, or in the purchase of undervalued securities when the boom has collapsed.

3. Unskilled speculative operations carried out independently in the investment markets cannot in general improve prices; but they are likely to increase their variability and consequently to lower the efficiency of the market.

4. Unskilled speculative operations, governed largely by irrational herd impulses, produce effects on prices which are wholly bad and lead to heavy social waste.

CHAPTER XLII

OTHER INCIDENTAL EFFECTS, AND CONCLUSION

JUST as in Adam Smith's time the use of the jack-plane injured the physical health of the carpenter, so speculation tends to exercise a destructive influence upon the capacities of those who engage in it. And as in neither case would earnings contain an amortization fund to compensate for the damage done, the injury is a net evil and must be separately estimated in any account of the social importance of the occupation.

In the case of speculation it is evidently much easier to describe these destructive effects than to evaluate them. To the more hard-headed and self-regulating people who deal with the uncertainties of the future in a business spirit, the possibility of drawing a profit from the changing values of securities may come only as a pleasant stimulus. It would be rather absurd, for example, to suggest that the cautious speculative investor or the seasoned jobber in the course of his normal business suffered any moral damage from his occupation.

But among the inexpert speculating public there must be many on whom the relatively large and easy losses and gains of speculation exercise a definitely demoralizing effect ; for the practice of confiding material welfare to the caprices of an unknown future must tend inevitably to destroy those pedestrian qualities of persevering, reasoned industry which have a high practical value as the world is now ordered. To many, no doubt, speculation brings its own antidote in the form of large losses to be set against trifling gains ; but in other cases these losses serve only as an incentive to further speculation until the fever is at last reduced in the calm of the Bankruptcy Court. The deteriorating effects of speculation may in particular cases be as severe, but they are evidently not nearly so widely spread as the closely analogous influence of alcohol. They could be better expressed in the form of biographies than as a generalization. Nevertheless, the general conclusion may be expressed that this incidental effect of speculation constitutes an evil of appreciable importance ; it introduces uncertainty on so large a scale as to weaken that connexion between "conduct and consequence" which forms the basis of rational conduct.

The main conclusions of this long argument may now be brought together.

The typical process of manufacture or trade consists of an operation confined within a set of exchanges; its product consists of the utility added to the goods by this operation; its payment is drawn from the price differences between the set of purchases and the set of sales. So long as the exchanges bounding this operation are free and intelligent the utility of the product must exceed the price at which it is sold. In such circumstances, therefore, the act of production yields a net economic contribution; but it may set up incidental effects which must also be taken into account before its social importance can be estimated.

The typical speculative operation, similarly, lies between a purchase and a sale; its product consists in carrying from a party who wishes to sell to a party who wishes to buy. This product appears on the Produce Exchanges mainly a service of carrying, on the Stock Exchange in the form of an increased marketability of securities. The payment for this product is derived from a price difference between the purchase and the sale; and this payment must be less than the utility of the product so long as the exchanges are free and intelligent.

In fact, however, there is no assurance that each of the parties to the exchanges bounding a speculative operation have adequate knowledge of the commodity in which they are dealing; for it is a matter of extreme difficulty to form a true estimate of the market value of a commodity whose price fluctuates with the imperfectly foreseen changes of the future. This uncertainty in the value of commodities is the source from which all the evils of speculation arise. On the London Stock Exchange its effect, on the one hand, is to enable the skilled speculator to abstract a part of the value of the security from the party with whom he is dealing, and so to obtain a profit in excess of the value of his services. On the other hand, it lures the unskilled speculator into operations which yield him little or no profit and which have incidental results productive of great social waste. In any attempt to estimate the social importance of speculative operations it seems essential to follow this distinction and to deal separately with the social effects of skilled and unskilled speculation.

The expert speculator or speculative investor has, by definition, bargaining knowledge superior to the party with whom he deals. He may obtain this superior knowledge merely by his good fortune in having access to inside information, or he may obtain it by the exercise of special skill and experience; but, whatever the source, he can employ it to transfer wealth to himself from the less well-informed public. In the one case, this additional profit is a kind of rent of position; in the other, it consists of earnings of management comparable with those obtained from ordinary business; but in neither case is there any social return proportionate to this additional profit. Its existence draws into the occupation business ability and energy which could be employed elsewhere with greater advantage to society.

The profitable employment of this superior bargaining knowledge is limited in two ways. In the first place, the public may, and to some extent do, act upon the advice of skilled brokers, and so bring their bargaining knowledge more into equality with that of the expert with whom, in effect, they are dealing. In the second place, the alertness of other experts in the market, especially the Jobber, greatly limits the scope of the operations which can be profitably undertaken in the light of any well-founded anticipation. The Jobbers, for example, would be likely to scent this anticipation at an early stage of the operations, and the consequent change in their quotations would protect the public from further depredations.

In spite of these safeguards, however, it is clear that society has no *a priori* assurance that the profit of skilled speculators as a whole is less than the utility of their product, and, indeed, there is little doubt that, by the use of superior bargaining knowledge, these speculators can obtain a return often greatly in excess of the profit appropriate to their operations. The presence of these abnormal profits do not, however, prove that these operations, in their total effect, do not yield a net social gain. To answer that question, it is necessary to balance three things: first, the value of the operations in increasing the marketability of securities; second, the total profit yielded by them, or, alternatively, the excess profit obtained by the exercise of superior knowledge; and, third, the importance of the incidental effects of these operations on the prices of securities and the characters of the public.

Let us begin with what may be vaguely described as the investment markets and deal first with the Jobber in the ordinary course of his business. The Jobber is both trader and speculator; as speculator he brings into business contact buyers and sellers separated by time. In the absence of this contact, the public could buy securities—and, what is more important, they could sell securities—only if there were already in the market some other party ready to deal in a contrary direction; or, alternatively, they could buy and sell only by offering to deal at a price so unfavourable to themselves as to attract some other party into the market. The important influence which such a condition would exert in checking the supply of capital against negotiable securities is the measure of the value of the Jobber's services. When account is taken of the fact that the price of this service, the Jobber's turn, is forced down by mutual competition stimulated by the Brokers, it seems safe to conclude on these grounds alone that the Jobber's operations in making a market yield a large *net* contribution to society.

In the case of other expert speculative operations carried out in the light of superior information (and including those similarly undertaken by the Jobbers) the net result is less clear. The direct effect of these operations is to reduce the Jobber's turn. But such speculators are, as it were, visitors rather than residents, and operations which they carry out on their own initiative are less important in their effects upon the marketability of securities than the ordinary operations of the Jobber carried out in response to the demands of the public. Nevertheless, these operations definitely reduce the price at which the public buy and sell securities, and to this direct contribution must be added their important incidental effects in establishing and maintaining a truer level of prices. Both these effects may be expressed in terms of a reduction in the supply price of capital. Whether this twofold economy is worth the price which the public pay over to the skilled speculator in the form of profits is a question which few people could answer with confidence. It must, however, be remembered that the acquisition of a good deal of these excess profits, particularly those due to the mere possession of inside information, does not involve any real cost, and is, therefore, only a transfer of wealth which leaves society as a whole as rich as before. When allowance is made for this fact it seems to be a reasonable conclusion that the operations of skilled speculators in the investment markets yield a net advantage to society.

Their operations in the markets for securities of highly variable and uncertain value are most conveniently dealt with in conjunction with those of the unskilled speculator.

In the social interest the very uncertain value of the securities in the speculative markets should call in capitalists able to make a calm and rational estimate of their worth and willing to buy and hold them at a price level at which their prospective net returns offered a high but reasonable yield. In fact, however, the naturally variable values of these securities have the contrary effect; for they attract into the market mainly the unskilled speculative public who have no qualifications for handling such difficult material —still less the ability to contend successfully with the skilled speculators whom they find there.

The speculative operations carried out in this market result, as in others, in reducing the Jobber's turn. It is difficult, however, to see that any appreciable social advantage arises from the increased marketability of these securities, for its main effect can be only to encourage speculative activity still more. Even in the investment markets the direct effect of the participation of the unskilled speculator is of doubtful social value, for although he reduces the Jobber's turn he does so at a heavy cost to himself.

The definition of the unskilled speculator shows that the effect of his operations in either the investment or the speculative markets cannot, on the whole, improve prices, but almost certainly distorts them and increases their variability. But his lack of adequate knowledge is perhaps less important in this respect than his temperament ; for susceptibility to the suggestion of rising prices leads to collective action on the bull side of the markets and consequently to price booms which result in a disturbance of production and heavy social waste. He may, it is true, enjoy the excitement of the game, but this is probably counterbalanced, in social accounting, by the deteriorating effects which accompany it.

The operations of the skilled speculator in these markets enable him to transfer wealth from the public to himself, a result which can hardly be reckoned as an evil—not, at any rate, so far as it serves to establish the reputation of the speculative market as a place of danger to be entered with caution and misgiving. Their effects on price are ambiguous, for while they may at times be designed to initiate or foster a boom, they serve at other times to bring prices more nearly into conformity with investment values. If no clear conclusion can be formed as to the net effect of the expert speculator's operations in these markets, it at least seems clear that the participation of the unskilled speculator results in a clear social loss.

We have then the final conclusions that the Jobber certainly, and the skilled speculators almost certainly, make a net contribution to economic welfare ; and that the participation of the unskilled speculator is probably harmful in the investment markets and certainly harmful in those for highly speculative securities.

These conclusions apply only to the London Stock Exchange ; for they are based only in part on effects which *necessarily* result from speculative operations ; they depend also upon questions of fact, such as the organization and constitution of the market, in particular upon the knowledge and temperament of those who speculate in its securities, and the presence or absence of deliberate manipulation. They cannot, therefore, be extended even to other Stock Exchanges ; still less to the Produce Markets, where the effects, though similar in kind, differ in relative proportions ; and, least of all, to speculative operations in such property as land, where bear operations are impossible and price exercises no important function in the regulation of production and consumption.

CHAPTER XLIII

TRADE CREDIT

IN their passage from the soil to the consumer goods pass through the hands of a series of owners, creating as they pass a train of debts, a series of trade credits. It is with the significance of these debts that we are now concerned.

In order to form any estimate of the volume of this great chain of debts outstanding at any time we should need to know the size the number and the length, as it were, of these links: that is to say, the value of goods at each stage of production, the number of owners through whose hands they passed and the length of the debts created between these successive owners. In fact, knowledge falls far short of this. We know that the final value of goods consumed in the United Kingdom in 1907 exceeded £1700 m.; but the facts are so extremely complex, the methods of selling vary so much at different stages in the same trade and at corresponding stages in different trades, that even those in the best position to judge can form no estimate of the size of the other two factors by which this figure should be multiplied in order to obtain the outstanding volume of trade debts.

The variety of selling methods within a single industry, and the consequent differences in the volume of trade credit engendered at each stage, may be illustrated by tracing briefly the movement of wool from the farm to the consumer. As the English farmer turns over his capital slowly, and may sometimes need to wait so long as two years before it is recovered in cash, he frequently takes credit extending to six or even twelve months from the dealers who supply him with fertilizers, feeding-stuffs and similar materials. The wool which forms one of his many products, he may in exceptional circumstances sell in advance; but more usually he will dispose of it at a local auction on terms similar to those on which colonial wools are sold in London: namely, for payment in cash within a few days. As few spinners care to lock up their capital in heavy purchases, or are able to foretell the grades they will require during the course of the year, this wool is likely to pass into the hands of the merchant, the top-maker, who carries varied stocks of wool, combs it into tops, and enables spinners to draw from him their particular grades as and when they need them. The merchant sells these tops for payment customarily within fourteen days; less usually, he grants credit against four or six months' bills to spinners of sound reputation but limited available capital. Between spinner and weaver, in contrast to the conditions prevailing in the cotton industry, there is no regular merchant class; yarn is sold for payment, within one or two months. Piece goods, the product of the manufacturer, may be marketed in a variety of ways: they may be sold to wholesale clothiers, commonly for payment within a week, but not unusually on credit varying from one to four months; to large miscellaneous retail dealers; to shippers, usually for payment within one month; or to merchant houses, sometimes on long credit where the merchant has to wait for payment from a tailor, frequently on terms such that spring goods delivered September to February are paid for in the following April.[93] It would seem, however, that this seasonal method of payment is now being abandoned; for, according to the *Wool Year-Book*, 1917, the standard terms for the sale of cloth provide for 4 per cent discount if the goods are paid for by the 10th of the month following dispatch, 2½ per cent discount if paid for four months later, and an interest charge of 7 per cent if payment is made in bills beyond that date. In pre-war days, the customary terms on which piece goods passing through the merchants' hands were sold to retailers seem to have been 3½ per cent discount if payment was made by the 1st of the following month and net prices if paid for within three months. To what extent these credit facilities are actually exercised little is known; but Mr. Abbott notes: ". . . it has been observed in a typical wholesale house, that only a comparatively insignificant percentage of the accounts were paid so promptly as to secure the best discount, while 25 per cent of these were not entitled to any discount at all, though the majority of this latter class were quite solvent."[94] There remains the final link in the chain—that connecting retailers with the public. It is clearly impossible to form any estimate of the volume of trade credit engendered at this point, but it may be noticed that in the opinion of Mr. Abbott "the habit of credit-buying is slowly decaying, and the practice of the stores and retail businesses encourages the growth of ready-money payments, and consequently accelerates this decay, a most desirable consummation, since in retail trade the credit system is an evil both to shopkeeper and consumer."

This rough indication of the train of debts originating in the movements of wool through its various stages of production suggests that their total volume is considerably less than might naturally have been expected. But it shows the great complexity and obscurity of the matter with which we are dealing: it shows how numerous are the points at which these debts may arise, how the conditions of credit vary not only between one point and another but between the different classes of purchasers at each point; and how readily the practice of paying cash or taking credit may vary with changes in the organization of a trade and with changes in the financial situation of either sellers or buyers. The complexity of the matter extends further still; for this, or indeed any other trade, cannot be taken as representative of conditions as a whole.

Consider, for example, the conditions in constructional trades where the manufacturer's product is sold directly to the consumer.

In the Building trades, long credits seem to be unusual; with the exception of timber, materials appear usually to be supplied to the builder for payment within a month. The terms on which the product is sold to the consumer must of course depend on whether the house is built on private contract or for speculative sale. The standard pre-war contract for London and other large centres provides that the builder shall recover 75–90 per cent of his invested capital at the end of two months, and that thereafter payment shall be made monthly. Accordingly the credit which he normally grants to the building owner is not large. In the case of working-class houses it is stated that 90 per cent have been built by private enterprise, mostly by private builders. According to the Housing (Financial Assistance) Committee, " The usual plan has been for the builder to purchase an Estate . . . and to build a few houses at a time. He has obtained temporary financial assistance from a bank, a solicitor, a builder's merchant, or a building society and has sold the houses as soon as possible after completion. It has been essential to the continuance of his business that he should have a ready sale."[95]

These two different methods of sale are found also in the Shipbuilding trades. "The marketing of ships and marine engines," say the Committee on Shipping and Shipbuilding, "is usually done either by replying to inquiries with or without specifications, or by individual builders offering to prospective owners on their own initiative. In many cases the terms of payment extend over a period of years, the effect being that in these cases shipbuilders virtually finance shipowners. Occasionally also shipbuilders put down vessels on their own account, so as to keep their yards going, in the hope of being able to dispose of the ships at a profit later. . . . Although there are exceptions, it appears, generally speaking, that while the majority of shipbuilding firms in this country have given long credits of from one to five years, or even more, to their English customers, they have usually insisted on being paid cash in their foreign business"[96] (cf. pp. 116–7).

In the Engineering trades the conditions of sale are very different. In that part of the industry which is concerned with the supply of machinery to meet special needs, "terms of payment" according to the Committee on the Engineering Trades "are generally spread over the period of construction and erection, the manufacturers' terms involving no extended period of credit."[97] In the Yorkshire district inquiry shows it to be customary for Engineering firms to obtain one month's credit from iron and steel manufacturers and to grant credit for a similar period to the parties to whom they sell their products. Finally, throughout the motor-car industry, it seems to be customary for manufacturers to sell to retailers only for cash on delivery.

These illustrations may easily be multiplied; but they serve their purpose in bringing out the immense complexity of the facts with which we are dealing. That complexity is increased when we take account of the fact that the volume of trade credit is constantly changing under the influence of many conflicting causes, of whose relative importance little is known. The volume of goods has clearly been increasing. The number of owners through whose hands they pass grows with the increasing specialization of industry; but this tendency to increase book debts is set off by the growth of co-operative stores and of large retailers who buy direct from the producers, and by direct marketing on the part of manufacturers of such commodities as boots, margarine, hats and so on. "... the tendency at present," says Mr. Abbott, "is in the direction of the gradual, the very gradual elimination of the wholesale dealer as such, and the assumption of his functions, wherever possible, by the selling departments of manufacturing businesses." There is a good deal of evidence showing that the period of trade credit was shortening prior to the war. Improved communications are no doubt largely responsible for this. "The old custom of buying heavily two or three times a year is now obsolete, and clever traders now buy from hand to mouth, weekly or even daily."[98] Other influences have been the deliberate effort on the part of individual trades, the superior marketability of short trade bills and perhaps the growing wealth of the community. During the war the heavy pressure of demand, the influence of State control and the financial prosperity of many trades seem to have reinforced these tendencies to shorten trade credit, a strong instance being seen in the changed conditions in the Boot trade. But it is clearly too early yet to conclude that such changes are permanent.

This great volume of book debts binding together the various parties to production has a twofold significance: in one aspec it is seen as an agency for the transport of capital; in another as supply of purchasing power, a means by which goods may be pu chased without the immediate use of any form of currency. Thes two aspects must be examined separately.

Mr. Weld, writing on mercantile organization in the Unite States, says: "On the whole, the brunt of the financing burden i borne by the wholesale trades, or sometimes by commission mer chants. Retailers and consumers are generally weak so far as th accumulation of capital is concerned, and on the other end of th marketing chain, manufacturers generally find it difficult to financ their own undertakings; so that the financing function of the wholesale intermediaries commonly extends in both directions."[99] This statement can be applied only in a modified form to the United Kingdom, where the reserves of business firms are much larger in proportion to their activities; but it would seem to be true that the function of supplying trade credit attaches essentially, though by no means solely, to the merchant; it is a function which combines conveniently with that of holding large and varied stocks of materials required by manufacturers and retailers.

Merchants and dealers are evidently in a very favourable position to make loans to manufacturers and retailers in the form of trade materials to be paid for at a later date. Their special knowledge of the character and means of their customers reduces the risks of extending credit without security of the kind required by a banker, and enables them to supply capital to many business men who would otherwise find it difficult, if not impossible, to obtain supplies elsewhere. By their means many weak firms are enabled to survive temporary emergencies and many men are able to obtain the resources they require to begin business on their own account. In the Lancashire Cotton industry, for example, trade credit is important in enabling men to begin business in a small way. "In manufacturing in Lancashire," says Professor Chapman, "much industrial plant may be hired. Room may be rented and also power. Moreover, looms and other machinery can be obtained largely on credit. Payment by instalment is not uncommon and the payment may extend over as lengthy a period as ten years. A manufacturer, too, may do his work on such terms, producing on commission . . . or getting credit for yarn and accessories, and giving shorter credit for his deliveries of cloth, or even receiving cash, that the circulating capital which he has to find is relatively small."[100]

Similar facilities are found in the spinning branch of the industry. It would be a typical case, prior to the war, for a company formed with a nominal capital of £100,000, to call up £10,000 on its issued shares, and to get the remainder of its initial capital partly by the purchase of machinery on one or two years' credit and partly by arranging with a Liverpool broker either for further trade credit, or possibly for a loan on condition that he should be the sole broker through whom the company conducted its business.[101]

Again, the Board of Trade Committee on the Engineering trades cite an interesting case where a boot and shoe machinery company, by leasing machines to manufacturers, has " contributed in no small degree to the development of the boot trade in the Midlands." They make it clear, however, that they disapprove of the scheme, and point out that "the manufacturer, who most frequently starts as a very small man without capital, is all his business life tied hand and foot to the Machinery company."[102] Whether for good or evil, trade credit is not less important in maintaining the supply of small retailers. In a London suburb, prior to the war, a small grocery business could be established with a minimum capital of about £500. No less than one-half of this amount, it is stated, might be supplied by way of trade credit to a man with a good business record. Again, a capable man of good reputation, beginning business in the drapery trade, could, it is said, obtain an addition of one-third of his cash capital in the form of trade credit from a wholesale house.[103]

As the security against which trade credit is obtained consists mainly of the business reputation of the customer, it is only to be expected that the terms on which it is granted should be somewhat onerous. Prior to the war, the credit obtainable by the grocer was shorter than that granted to the draper, for he turned over his capital more rapidly. The recognized terms were : 3d. in the £1 discount for payment within fourteen days and net prices for payment at the end of two months. This corresponds to an interest charge of about 10 per cent per annum, for two months' credit, as compared with about 14 per cent per annum for three months' credit in the drapery trade and about 7 per cent per annum for credit up to six months granted by woollen and worsted manufacturers in the sale of piece goods to merchants.

These terms represent, however, only a portion of the burden falling on those who rely largely on trade credit ; they often carry with them a limitation of the freedom to buy and sell in the best market ; the debtor is tied, in a less degree, but in a similar way to retailers in such trades as brewing, tobacco and jewellery. Instances have already been quoted from the cotton and boot trades of the manner in which the debtor is required to buy exclusively from the party who has granted him trade credit ; they are plentiful in the retail trades and in agriculture. Mr. John Ross, who recently made an inquiry into the commercial relations prevailing in English agriculture, gives instances of the evils of long trade credit which are interesting, though there is no reason to suppose them to be at all typical. "The worst feature of this kind of credit, however," he says, "is where it is granted in consideration that the farmer shall sell his produce or crop to the tradesman, seedsman—or other . . . The price at which the produce, etc., is taken in exchange is often fixed entirely by the tradesman in his own interest . . . and the reduction of price is actually a second interest charge for the original advance." [104] It is not to be supposed that the costs of trade credit are universally so onerous as these illustrations may suggest; but the view that they are heavy is borne out by the general opinion that it is greatly to the advantage, at any rate of retailers, to be in a position to pay cash to the wholesalers and manufacturers with whom they deal.[105]

In spite of the great complexity of the facts, the nature of trade credit, in its first aspect as a supply of capital, is found to be comparatively simple. It forms an agency supplementary to the banks by which business men supply trade materials for short periods to other business men of whose ability and integrity they are in a specially favourable position to form a sound opinion. In its second aspect as a supply of purchasing power, trade credit is less simple; for not only are the essential facts more obscure, but the theoretical considerations by which those facts must be judged are themselves more difficult.

Trade credit enables goods to be bought for payment at a later date; it enables them to be bought without any immediate use of the existing stock of currency; it forms, therefore, during the period it is outstanding, a net addition to the purchasing power exercised by the community. If its volume were constant, or changed only slowly, this effect would have little significance. The condition would be that there would be always outstanding in the hands of purchasers a certain quantity of goods for which no payment had been made, and prices would consequently be a little higher than would have been the case had the existing stock of currency been drawn on to effect their purchase.

In actual practice the matter is a little more complicated. In its simplest form, the purchasing power created by a trade credit is used only once; it is employed to buy a quantity of goods; and it enables the price of those goods to be driven upwards without drawing away currency from employment in the purchase of other things, and so without causing a fall in the prices of those other things. If, however, the credit is embodied in the form of a bill of exchange which is employed as a means of making further purchases, its effect on prices is multiplied by the number of times that bill is so used. Further, if the bill is discounted, or if in other ways the original credit operates as a means of drawing additional currency from the banks, its influence on price is likely to be still further increased. This, however, is only a complication; so long as its volume and its methods of use remain constant, trade credit, from the present point of view, is of no great significance.

It becomes significant when its volume, or method of use, changes considerably in short periods; when the volume of purchasing power to which it gives rise expands or contracts on a scale which causes appreciable fluctuations in prices. The question, therefore, with which we have to deal is this: What is the importance of trade credit in initiating changes in the purchasing power of the sovereign and the disturbances which these changes introduce into the adjustment of social resources to social needs?

That trade credit has been an important disturbing influence in the past is shown by J. S. Mill. "Of the extraordinary height," he writes, "to which speculative transactions can be carried upon mere book credits, without the smallest addition to what is commonly called the currency, very few persons are at all aware. 'The power of purchase,' says Mr. Tooke, 'by persons having capital and credit is much beyond anything that those who are unacquainted practically with speculative markets have any idea of . . . a person having the reputation of capital enough for his regular business, and enjoying good credit in his trade, if he takes a sanguine view of the prospect of a rise of price of the article in which he deals, and is favoured by circumstances in the outset and progress of his speculation, may effect purchases to an extent perfectly enormous, compared with his capital.' Mr. Tooke confirms this statement by some remarkable instances, exemplifying the immense purchasing power which may be exercised, and rise of price which may be produced, by credit not represented by either bank notes or bills of exchange."[106]

The potentialities of trade credit as a means of causing wide fluctuations in the volume of purchasing power are clear enough; the difficulty is to know how far they are actually operative in modern business conditions.

Local changes in the volume of trade credit are certainly a cause of fluctuations of price in particular markets. The pre-war practice of buying leather by means of three months' bills was responsible, according to the *Boot and Shoe Trade Journal*, for considerable speculative price fluctuations.[107] Again, "Some of the chief products of ore and coal," says Dr. Marshall, "can be graded fairly well; the demand for them is liable to extreme fluctuations under the influence of commercial credit generally, and especially in the credit which the public accords to new joint-stock companies and extensions of old companies."[108] In the most highly organized markets, dealings in "futures" enable people of all kinds to buy produce freely without the use of any money beyond that required to cover adverse price differences occurring during the course of their contracts. Such public facilities for buying without money almost inevitably tend to distort prices; for it seems tolerably certain that any beneficial influence which dealings in futures may have in smoothing out the larger price fluctuations is due less to these special facilities for purchase than to the scope which the system affords for bear operations by skilled speculators. In the analogous case of the Stock Exchange in pre-war days, the period for which securities could be bought on credit was curtailed by the practice of a fortnightly settlement; but the existence of this period and the great ease with which money could then be temporarily borrowed from a broker in order to "carry over," and so extend a credit purchase, greatly promoted price fluctuations in many speculative securities.

Trade credit, by promoting local price fluctuations of this kind, necessarily adds to the uncertainty of business and diverts energies to the acquisition of profits which add nothing to social wealth; its chief interest, however, lies in its more general changes, and in the effects of these changes on the course of business cycles. What changes occur in the volume of trade credits during periods of rising confidence and growing business activity, and what influence do they exert on the upward movement of prices by which the intensity of the cycle is reinforced?

General reasoning does little more than add to the difficulties of finding an answer to this question. It shows that at such times there are influences working both for and against an expansion of trade credits. In so far as shipbuilding is in this respect typical of industry generally, the example quoted on page 117 shows that in times of active business, producers "stiffen their backs" and grant shorter terms to the parties to whom they sell. At such times, too, the greater profitableness of business must enable merchants and retailers to buy more largely for cash; though this tendency is likely to be neutralized by the larger volume of their current purchases. These considerations carry with them the disconcerting suggestion that trade credits, so far from expanding, may even contract during periods of growing business activity. There is, however, a strong influence working in the opposite direction. Periods of rising confidence are periods of anticipation of profitable future sales; they are, therefore, periods of keen demand for the materials by means of which these profitable future sales may be realized. At such times producers, needing all their resources to expand their output, may well shorten the period during which they are prepared to wait for the payment of goods *which they actually deliver*; but such action will not curtail the use of that more tenuous form of trade credit which is exercised in speculative purchases on the organized markets and in orders given by merchants and other parties for goods *to be delivered at a future date*. A growing expansion in the volume of contracts for future delivery, involving a continuous creation of purchasing power and a continuous rise of prices, may clearly go to great lengths; its only limits will lie in the credit of the purchasers, the cash deposits they may be required to make on their contracts and their confidence in being able ultimately to sell their purchases at a profit.

Evidence of what actually occurs at such times is scanty. One clear fact is the increase in both France and Germany in the number of bills created during periods of growing business activity. M. Rouileau points out that in France the *larger* bills—those of about £200—show a marked increase at such times and reach their maxima in the years of crisis; he adds that business men in commerce and industry in general draw their bills only when they want to discount.[109] These facts suggest that trade credit in its full sense—the actual delivery of goods for payment at a later date—does expand during such periods, but does so by means of resources obtained from the banks. Whether or no this is true of England, post-war experience shows clearly how business activity increases the volume of trade credit in its more limited form—that of contracts for future delivery in the speculative markets and throughout industry generally. The heavy pressure of demand which followed the close of the war led, as is well known, to merchants and other parties placing orders for iron and steel products, motor cars, pottery, textiles and other goods for delivery many months, even years ahead. In exceptional cases these orders were accompanied by the payment of a cash deposit; but broadly speaking they were purchases which involved the use of no money until the contract was completed by actual delivery. If it is denied that the pressure of these orders raised prices, reference may be made to many specific statements by producers that in order to avoid further commitments they have quoted prices which they intended to be prohibitive but which were in fact immediately accepted by their customer.

It seems reasonable therefore to conclude that periods of rising confidence, based on the anticipation of profitable future sales, lead to an expansion of contracts for future delivery both in the speculative produce markets and throughout industry in general; that this expansion involves the creation of additional purchasing power; and that this additional purchasing power exerts a powerful upward influence on prices, which reinforces confidence and emphasizes the intensity of the business cycle. The influence of trade credit in this way in increasing the volume of purchasing power is no doubt partly dependent on the anticipation of a subsequent expansion of bank loans, and its effects are bound up with those of other changes, such as more rapid investment on the part of the public. But it seems impossible to doubt that the large variations which occur in the volume of contracts for future delivery are an important cause of the wide and frequent fluctuations in the prices of goods in the hands of merchants and manufacturers.

TRIES
7-MAR. 1925

CHAPTER XLIV

CONCLUSION

THROUGHOUT this book the work done by the various market agencies has been considered with a view to bringing out the nature and importance of the economies they effect in faciliating the movement of capital in the direction required by the social interest. This method of treatment has made it impracticable to separate that part of this work which deals with the supply of capital to parties who employ it to increase their current consumption from that part which is concerned with the supply of capital to those who employ it to maintain and increase the accumulated stock. By so doing, it has tended rather to obscure the position occupied by the market in the social machinery for production. If the market agencies are considered in that aspect of their work in which they are engaged in supplying capital for business purposes they are seen to form an organic part in the organization of society as producer.

Society has, on the one side, resources and, on the other side, wants; its object as producer is to adjust the one to the other in a manner which yields the maximum return. The parties to production may be separated into groups in accordance with the function they perform—the nature of the services they supply: first, the Landowners who let on hire the free gifts of nature; second, the Capitalists who supply the products of past labour; third, Labour, which supplies subordinate manual and mental services. Each of these three groups is linked by its appropriate marketing organization to a fourth group of Entrepreneurs, or business men, whose function it is to assume the responsibility and control of production. They combine the services of land, capital and labour with their own, and apply them to their productive uses in satisfaction of social wants.

Regarded realistically, a single person may be found to belong to several of these classes: a railwayman may belong to the group of labour inasmuch as he works for a wage; he may have savings which constitute him a Capitalist; and he may be an Entrepreneur in so far as he participates in railway management. But, although confused in the concrete, these classes are distinct in function and may quite properly be grouped in accordance with the nature of the service which each contributes to production.

In this way we may speak of a distinct class of business men who have at their disposal all the productive resources of the community. The services of the hundreds of grades of labour are made over to them with the assistance of Employment Exchanges, Trade Unions, newspapers and the more indefinite machinery of the labour market; the available capital of the community passes under their control with the aid of the Money Market. Business men, having made their forecasts of social needs, and having organized the resources at their disposal, turn their multitude of products into the markets. This continuous flow into the markets is followed by a continuous process of exchange, by means of which the products forming the output of society as producer are redistributed and reappear as the real income of society as consumer.

The agencies forming the Money Market, in that aspect in which we are now regarding them, lie then between the group of capitalists and the group of business men; they facilitate the movement from one to the other of the control over that part of the resources of society which is annually devoted to the maintenance and extension of the accumulated stock of capital. They correspond to what Dr. Marshall describes as the "Organization by which the appropriate business ability and the requisite capital are brought together" and made effective for production.[110]

In so far as business ability and capital are not already in the same hands, or joined together by private negotiation, these agencies take over from the capitalist, in some cases wholly, in others partly, the work of management associated with the supply of capital. Their organization is placed at the disposal of the capitalist only, of course, at a price. The payment which they receive consequently enters into the expenses of production of those firms who obtain their capital by means of the market. So, too, the equivalent of this payment forms an addition to the profits of those firms whose capital and business ability is associated without the assistance of the market. It is those additional profits (in so far as they are rightly interpreted here) which form the difference between "net" and "gross earnings of management" as conceived by Dr. Marshall.

At this point there arises the question: What is the scope of the work done by these agencies; what proportion of the annual flow of capital passes through the market? If the question referred to our foreign investments, a fairly definite answer could be found by a reference to the table and the accompanying text on page 186. The answer would be that much the greater part of these investments were made through the market and that the agencies by which they were effected were principally the securities market and the Trust, Financial, Land and Investment companies. It is much less easy to find any definite answer to the question: What proportion of the annual flow of capital applied to business uses in this country is transferred to business men with the assistance of the market?

Much the larger part of this annual flow (cf. p. 69) consists of resources devoted to the renewal of stocks of materials and the upkeep of plant. The bulk of these replacements presumably takes place by way of allocations from gross profits applied directly by the owners in whose hands those profits arise. But a substantial part is effected by means of the banks and the organization of trade credit; for a typical operation of the English banks is one by which they finance the heavy autumnal purchases of raw materials made by the cotton industry, gradually recovering their loans during the following summer as these materials pass through the industry into the hands of consumers. The resources controlled by the banks and those devoted by business men, from their own means, to supplying goods against deferred payment are perhaps most conveniently regarded as a *stock*: a stock employed partly in initiating new investment; but employed mainly in the continuous replacement of materials at each stage of production and recovered as they move towards succeeding stages.

It is of more interest, however, to inquire what work is done by the market on the latter part of this annual flow: the stream of resources applied to *increase* the stock of materials, plant, buildings and so on in this country. Of the average volume of new home investment, or of its annual fluctuations, little is known statistically. As an indication of our total annual investments, there is Mr. Flux's estimate that in 1907 about one-sixth of the total national output, say £330 m., was available to add to our accumulated stock of capital.[111] As an indication of our annual foreign investment there is Mr. C. K. Hobson's estimate that the average volume of our capital exports for the three years 1908–10 was £130 m.;[112] an estimate in rough agreement with Sir George Paish's statement that "the actual amount of new capital supplied by Great Britain to other lands was: in 1908, £130 m.; in 1909, £160 m., and in 1910, £165 m. . . ."[113] The difference between these two sets of figures agrees fairly well with the estimate of £200 m. devoted to home investment in 1907.[114] A little reduced by an allowance for investments in furniture, public parks, and similar non-business uses, it gives an idea of the order of magnitude of the annual stream of resources devoted to capital uses at home. The figures are, of course, highly conjectural; but not more so than the argument which follows.

Sir Robert Giffen, writing in 1889 on The Growth of Capital, said, "... the regular annual investment by individuals in their own businesses or properties ... must always be the most important form of saving—far more important than the visible public investments."

If the term "investment" is taken to exclude the export of capital and subscriptions to war loans and similar issues, and is taken to include only the additions to the home stock of accumulated capital, this statement seems still to be true, in spite of the development of the market during the last twenty-five years.

At first sight it appears to be contradicted by the work of the securities market: by the fact that substantially the whole of the immense amounts of capital controlled by such undertaktakings as railway, telegraph, tramway, electricity, gas and water companies, have been supplied through this agency. But the construction of these means of communication has been spread over a long period of time, and the annual additions are now not large. Prior to the war, for example, British railways were raising new capital on the London market to the extent of no more than £2 m. per annum; while the total annual addition to the capital of gas and tramway undertakings was under £5 m.; moreover, in municipal concerns of this kind, there is at least a legal provision for the repayment out of profits of the capital embarked in the undertaking.

Every year a considerable stream of resources is supplied by the securities markets for such purposes as the development of new coal areas, the formation of insurance companies, the construction of ships for small shipping companies, of cotton spinning factories and picture palaces; and for the extension of docks and harbours, iron and steel works and a multitude of other undertakings. This stream is conspicuous and its volume considerable: but it seems to be of quite secondary importance in relation to the flow of resources by way of private contract and the reinvestment of profits. This opinion may seem more reasonable if a few illustrations are taken from particular industries in order to suggest the manner in which businesses obtain the resources required for their formation and extension.

The most conspicuous instances of joint-stock organization are the banks and the insurance companies; they obtain practically the whole of their paid-up capital through the securities market. But even here the work done by the market is easily overestimated; for to find the total capital controlled by those organizations we must add in their reserve funds and immaterial business organization, both of which are created by the direct investment of undistributed profits. How substantial this addition may be is shown by the fact that the reserve funds of the English joint-stock banks are nearly equal in amount to their aggregate paid-up capital. The use of the public joint-stock company as a means of obtaining capital for the creation of new undertakings is again especially marked in cotton spinning. But the initial capital which a new undertaking obtained in this way, in pre-war days, was comparatively small, perhaps £10,000 on the average. Much was obtained by way of trade credit and bank loans, and was repaid out of profits as the company gradually grew to its full strength.

In the weaving of cotton, where less initial capital is required, the work done by the securities market is still less. This would be a typical method in which the industry has grown in north-east Lancashire. Initially, a Room and Power company buys an existing mill, or builds a new one, and offers it, in floors, to tenants; while a speculative builder, anticipating demand, runs up cottages for later sale. A small weaver, aided by trade credit from the machinery makers and possibly by a loan from a bank, hires power and a floor in the mill and begins work with perhaps a hundred looms. As accumulating profits increase his resources, he multiplies the number of his looms. The same process continued in his own or a second generation enables him to build a new mill, to repay the mortgage with which it is charged and to build another. At least one large centre in Lancashire has developed in this way, expanding and subdividing like an organic thing.[115] Trade credit and the banks have been important in early growth, but the body of the industry has been formed by the reinvestment of accumulated profits.

Again, the Belfast linen industry seems to have obtained little of its capital from the public sale of stocks and shares; the great bulk of it has apparently been drawn from profits and by the placing of the securities of private joint-stock companies among parties associated by personal or business interests.

In the building trades and in agriculture, joint-stock companies are rare. According to business men in the Rushden (Northants) district, capital in the boot trade is derived mainly from savings. "Most of the large businesses have started in a very small way, and gradually have been extended as the owners' means have increased. Most of the capital in the trade has been made in it and capital provided by friends and relatives owes its origin to the same spring."

In the woollen and worsted industries the practice of obtaining capital by the public sale of securities has made no great progress; ". . . the family business," says Dr. Clapham "though it may have assumed the company form, is still the prevalent type." "... mills that accommodate more than one manufacturer, and firms that start in a humble way by working on commission for their neighbours, are still common enough. . . . There is still room for the small employer, although his sphere of action tends to get narrowed year by year." [116] *The Wool Year-Book* gives an impressive list of the private fortunes made in the industry.

According to good authorities, the heavy iron and steel trades in the North of England originated as private undertakings and grew mainly by the reinvestment of profits. They were later converted into private, and to a less extent public, joint-stock companies, largely because of the heavy risks to which the industry is exposed. The securities market has aided little, if at all, in their formation; but in the past the sale of securities in local markets, and, during the last ten years, the public sale of securities on the London market, has provided the resources necessary for their extension.

So, too, with the shipbuilding and ship-repairing firms on Tyneside. Originating almost without exception as private undertakings, they have grown by means of resources supplied by profits, partnership and private contract. Some have passed into joint-stock form and obtained a good deal of their capital from public subscription, but only a relatively small part of the total capital of the industry seems to have been obtained in this way.

In the Yorkshire district it appears: "The Engineering trade gets its capital mostly from inheritance and savings. A great majority of the firms have begun in quite a small way; a single, capable and thrifty workman, or two or three such men, have started in a very small way; one could give scores of such cases . . . partnership certainly provides some of the permanent capital. It is no uncommon thing for a small engineer to secure as a partner a man with capital which can be used to develop the business. . . . Capital is not, as a rule, obtained from the public by floating joint-stock companies. Cases of this kind are very rare. . . . It has happened in the case of one or two companies making electrical appliances. I have not been able to find examples of joint-stock companies issued to the public locally. Most of the joint-stock companies in the trade are simply conversions. . . . My inquiries lead me to believe that trade bills do not to any great extent help engineering firms to obtain money from banks. Overdrafts are not uncommon, and some of the old small banks have done exceedingly well for themselves and have helped to build up very successful engineering businesses by the way in which they granted overdrafts to men and firms with good business reputations." [117]

These illustrations may be supplemented by considering a sample of ninety-one of the leading firms of Gloucestershire (excluding Bristol) in 1904. Of these, 54 were private firms, 37 were limited liability companies; and of these 37, only four or at most seven originated as joint-stock concerns; the remainder were conversions.[118]

These data are fragmentary; but taken in conjunction with the considerations of Chapter XXXI they convey a fairly clear impression that the amount of capital annually passing through the securities market and applied to the extension of the business equipment of the country is comparatively small, and is probably in the neighbourhood of one-quarter of the whole.

A substantial part of the total free resources of the country is placed under the control of the banks in the form of lodgments on current and deposit accounts. The greater part of this, it would seem, is employed in financing commercial processes originating in the continuous replacement of the streams of materials passing through the successive stages of production. Some part of the remainder, some unknown fraction of the total volume of outstanding loans and advances, is applied each year to the extension of stocks, machinery, plant and buildings. This fraction forms a part of the annual flow of resources into new home investment. Supplied generally for comparatively short periods, it serves to initiate the profit-making process and is normally repaid from profits as they accrue.

Pass now to the outer market. Little or nothing need be added for the work done by the organization of trade credit. The resources supplied in this way are drawn from the banks and business houses generally and are applied mainly to the maintenance of existing stocks. Some of these resources, no doubt, are applied to the extension of business. But in so far as they are drawn from the banks, they have already been reckoned; and in so far as they are drawn from other business houses, they consist of resources which presumably would otherwise have been invested directly by the business house in the extension of its own organization.

A final addition must be made for the work done by Building Societies, which in 1913 advanced some £9 m., and for that of solicitors who facilitate the movement of capital against mortgage and similar security into such uses as the development of agriculture and the construction of buildings. This work no doubt is substantial in volume, but its amount cannot be estimated. Moreover, it has no natural boundaries and shades off imperceptibly into the common business practice of obtaining capital by way of private contract.

Since the boundaries of the Money Market in its widest sense are themselves indefinite, the scope of its work cannot be defined in figures. But if account is taken only of the specialized organizations forming the Money Market proper, it seems reasonable to conclude that the resources which are annually applied, through their agency, for the expansion of the business capital of the country probably do not amount to one-half of the total annual stream of new home investment. It seems still to be true that the predominant methods by which business men in this country are supplied with the resources they require to extend their operations are those where the economic distance to be bridged is small, where capital has not "far to go," where the sources of demand and supply are connected by personal or business ties, or in the limit are identical. It is supplied mainly, it may be presumed, by way of partnership, in that broad sense of the term in which it includes private joint-stock companies; by way of borrowing from personal and business friends; and above all in the form of the persistent reinvestment of profits by which small businesses are continually growing into large undertakings in almost all branches of industry and trade.

The proportion between the work done by the market in supplying capital for business uses and that done by business men on their own account has in itself no great significance. The important consideration is that the services of the market should be adequate, on the one hand, to draw forth savings which in the absence of facilities for investment would not be forthcoming; and, on the other, to ensure that capital is evenly distributed throughout its field of employment. The English market has clearly a powerful influence on supply; for, by taking over from the investor many of the risks and much of the trouble involved in home and foreign investment, it greatly increases the annual volume of saving. Its work is not less important in facilitating the movement of capital into its most profitable uses. By the ease with which it transfers capital rapidly from one point to another, it enables business men to meet temporary emergencies and to exploit opportunities for which their own means are inadequate. By supplying business ability, as it emerges, with the resources which make it effective, it helps to maintain the vitality of industry. By promoting the ready flow of capital abroad it enables us to establish claims on the produce of those countries on which we are dependent for our supplies of food and raw material. In one part of its work it increases that portion of the productive energies of the country which may be employed in making provision for the future; in the other it enables those energies to be applied in their more profitable uses; in both, it increases the National Dividend.

NOTES

THE occasional acknowledgments made in these notes to Dr. Marshall and Professor Pigou are a very imperfect recognition of the extent to which I am in their debt. From their writings and teaching are derived most of the general conceptions in the book which are tolerably certain of acceptance. The treatment of the subject is indeed little more than a development, right or wrong, of leading ideas which they have laid down. I have also to thank Professor Foxwell for several valuable suggestions; Mr. Henderson of Clare College and Mr. Pott of the London Stock Exchange for reading over parts of the manuscript; Mr. K. Broadley and other gentlemen for inquiries made on my behalf; and Mr. Richardson of Emmanuel College for his assistance in the correction of proofs.

[1] The phrase " power to borrow " is not quite wide enough; for the ability of a joint-stock company to obtain additional supplies of capital by the sale of its shares involves the use of its credit, but is not strictly an act of borrowing. There is much to be said in favour of regarding a credit and a debt as two aspects of the same thing; but this use of the term would require us to mean by a man's " credit " the volume of debts owing to him, *i.e.* the *actual* and not the *potential* volume of his debts. On the whole, it seems slightly more convenient to follow Mill, and use the term as broadly equivalent to the " power to borrow " rather than to actual borrowings. This is the sense in which it is used in this book, except when dealing with trade credit, where the context makes the meaning tolerably clear.

[2] *History of British Commerce*, 2nd edition.

[3] Prof. Lehfeldt, in his *Gold, Prices and the Witwatersrand*, 1919, endeavours to find how far the various currency devices, such as cheques and notes, have been successful in economising gold. He gives estimates of the proportions, in various countries, between the total amount of currency held by the public and the total amount of gold held by the public and the banks together. This " currency factor " is estimated to have been in pre-war days :—For the United Kingdom perhaps 5·6; for the U.S.A. about 5·5; for France perhaps 2·3; for the world (excluding India and China) probably between 2·5 and 3·0.

[4] Report of the Indian Industrial Commission, 1916–18 (Cmd. 51), p. 179.

[5] *Ency. Brit.*, art. " Stock Exchanges."

The character of French investment differs sharply from that of investments by other countries. In Great Britain, Germany and the United States, according to M. A. Neymarck, the greater part of the securities held a few years prior to the war were of the kind yielding a variable return; while in France no less than three-quarters of the securities held were in the form of state and municipal loans and bonds yielding a fixed rate of interest. Nowhere else but in France, he says, is there found so great an accumulation of capital belonging in great part to the small capitalist. Of the disposable French savings, he estimates that an average amount of £60 m. annually passes into *valeurs mobilières*. (A. Neymarck, *Finances Contemporaines*, vii.) According to Prof. B. M. Anderson (*Effects of the War on Money, Credit and Banking*, 1920, p. 38), " The direction of French investment . . . has been subject, not to the free movement of capital, sent piecemeal under competitive conditions, by alert investors, to those lines of investment which promised the best yield for a given degree of safety, but has been controlled by a few great banks, working to a large degree in harmony, acting for a passive body of depositors, and controlling public opinion through the press. In choosing the investments, these bankers have in no small degree been moved by the fact that certain lines of investment gave them higher commissions than others." " There can be little doubt that in many of these operations French bankers have shown themselves greedy in a marked degree, and that the greed has been largely at the expense of their confiding clients." He points out that selling costs have been high, and quotes an opinion that " The profit is rarely less than 5 per cent of the selling price of the issues."

[6] Lehfeldt, *Gold, Prices and the Witwatersrand*, App. A. Estimate of gold in circulation in the U.K., outside the banks, 1910, £84 m.

[7] *Ibid.*, App. A.

[8] " It would seem that the number of cheques stamped in 1919–20 was approximately 360,000,000, as compared with 312,000,000 in 1913–14 and 324,000,000 in 1917–18."—Reply to Parliamentary Question by the Chancellor of the Exchequer. See *Times*, 20 May 1920.

"It is stated by bankers who are likely to be well informed that the cheques which do not pass through the Clearing House in this country are probably as great in amount as the cheques which do pass through the Clearing House, *so that the daily circulation in this way, reckoning by the amount of cheques actually paid in any one day, must exceed or be about £50 m.*"—Giffen's *Statistics*, p. 315.

The value of cheques, etc., passing through the Bankers' Clearing House in 1920, was £39,000 m.

[9] Lehfeldt, *op. cit.*, p. 41.

[10] The following estimates of the money of Germany are given in *Currencies after the War*, 1920 (League of Nations publication) :—

	June 1914. £ m.	June 1919. £ m.
Gold at Spandau	15	—
Gold in Reichsbank	64	56
Silver in Reichsbank	17	9
Gold in hands of public	100	25
Silver in hands of public	50	
Reichsbank notes	120	—
Darlehnskassenscheine	—	40,000 m. marks.

[11] " A German merchant may have £5000 to £10,000 in notes in his safe and not think it unusual."—General Manager of a large English bank, 1916.

[12] In Germany the cheque appears to be used mainly for local and foreign transactions. Its development has been hindered by the existence of the Giro system of the Reichsbank, the Great Banks and the Post Office, by means of which the great mass of distant payments within the country is

carried through. Anyone who wishes to make a payment elsewhere usually hands to a bank, or a post office, cash or an order on his account, together with a statement of the party or parties to whom this amount is to be transferred. The bank or post office then undertakes the payment of these amounts either directly, or to the account of, the distant parties. The cheque law of 1908 has removed many of the obstacles to the growth of the cheque system. It is stated that in 1907 the number of cheques paid by the Deutsche Bank exceeded 10,000 daily, the total amount paid during the year being about £250 m.

Miscellaneous Articles on German Banking: "The Giro System"; "The Use of Cheques in Germany." Also, Riesser, *The German Great Banks*, pp. 149 and 217.

[13] The following estimates of the money of France are given in *Currencies after the War*, 1920:—

	June 1914.	Jan. 1920.
	£ m.	£ m.
Gold in Bank of France	102	223 (£79 m. held abroad)
Silver in Bank of France	26	10
Gold in hands of public	200	100
Silver in hands of public	60	80
Notes in circulation	242	38,000 m. francs

It may be noticed that Théry's estimates of the amount of gold and silver money in public circulation in 1908 were substantially lower than these: *i.e.*, Gold, £124 m.; Silver, £47 m.—*La Fortune publique de la France*, 1911.

[14] The number of cheques issued in France doubled during the fourteen years previous to 1912. In that year the number of cheques issued was fifteen millions, the average value being £230, and the aggregate value £3400 m.

M. Roulleau gives the following estimates:—

Bank-notes daily passing from hand to hand	£220 m.
Gold daily passing from hand to hand	£230 m.
Cheques in circulation on any one day	£13 m.
Cheques in circulation on any one day, U.K. ..	£60 m. to £80 m.

He points out that the French practice of accepting bills at the house of the drawee, instead of at a bank, leads to an extravagant use of currency. The private banker presents his bills just before maturity to the Bank of France and receives cash for them. This cash is paid out to his customers, who employ it to pay the bills presented at their houses. The bills so presented by the Bank of France number hundreds of thousands.—G. Roulleau, *Les Règlements par effets de commerce*, 1914.

[15] Report of Gold Production Committee, 1918, App. A. The decline has continued. In 1920 the total output was £70 m.

[16] U.S. Mint Report, 1915, p. 63. Quoted in Lehfeldt, *Gold, Prices and Witwatersrand*, p. 8.

[17] Quoted by Riesser, *The German Great Banks*, p. 238.

[18] "The fluctuations in the value of what we use as our standard are ever either flurrying up business activity into unwholesome fever, or else closing factories and workshops by the thousands. . . . I shall argue that . . . the only effective remedy for . . . [the greater part of the fluctuations in general prices] is to be sought in relieving the currency of the duty, which it is not fitted to perform, of acting as a standard of value; and, by establishing in

accordance with a plan which has long been familiar to economists, an authoritative standard of purchasing power independent of the currency."—Dr. Marshall, art. in *Contemporary Review*, March 1887.

[19] "But after all, the fluctuations in prices from decade to decade are small in the aggregate as compared with those from year to year, and contribute but a very small share to those uncertainties of business which are the cause of so large a share of human suffering and degradation."—Dr. Marshall, art. in *Contemporary Review*, March 1887.

[20] Cd. 9182.

[21] *Principles of Economics*, 5th ed., VI. vi. § 6.

[22] *The Export of Capital*, p. 204.

[23] Goschen's *Essays*.

[24] Estimate by the *New York Times*, quoted by S. S. Pratt in *The Work of Wall Street*, p. 143.

[25] *The Wealth of Nations*, Book I., ch. 10.

[26] Riesser, *The German Great Banks*, p. 95. Prof. Pigou, writing in June 1918 (*Economic Journal*), estimated that at the end of the war our holdings of securities might amount to 60 per cent of the national wealth.

[27] The Crédit Foncier, a state-aided and privileged institution, is the only important mortgage-bond company lending on land situated in France. Its principal business consists, on the one side, in borrowing from the public at about 3 per cent against the issue of debentures; and on the other, in lending at about 4 per cent, for periods up to 75 years, to landowners, municipalities, etc. In 1911 it had outstanding:—Debentures, £157 m.; loans against mortgages, £92 m.; communal loans, £82 m. The average cost, borne by the applicant, was about 3½ per cent of the loan. The main purpose of the institution was to aid agriculture; but for one loan made in the country it makes twenty-two in a city, where the trouble and expense of the operation are lower.—M. T. Herrick, *Rural Credits*, 1914.

[28] "Much of the present-day underwriting is done on the Stock Exchange, and a member will approach another with sometimes little more than a slip of paper, upon which are jotted brief particulars of the people connected with the matter, the proposed capital, profit estimates, etc. The names on the paper are what really count, and if first-class people are connected with any concern, underwriting will present no difficulties."—*Investors' Monthly Manual*, 1910, p. 1. Lecky's view of credit is interesting in this connexion. In his *Rationalism*, p. 348, he maintains that it "has long proved one of the great moralizing influences of society, by the immense importance it has bestowed on character. . . ."

[29] "By their system of granting cash credit to any individual able to offer a satisfactory security, even if it be no more than the guarantee of two respectable householders, the Scotch banks have raised many a penniless struggler to a position of competence, ay, of absolute eminence."—L. Levi, *History of British Commerce*, 1880, p. 287.

[30] Herrick, *Rural Credits*.

[31] Théry, *La Fortune publique de la France*, 1911. Riesser, *The German Great Banks*, p. 224.

[32] "Notes on Mortgage Laws and Valuations," A. L. Cox, *Transactions of Surveyors' Institution*, 1912–13. "The Development of Building Land," J. J. Done, *Transactions*, 1911.

[33] G. Biddell, *Loans of Local Authorities*, pp. 10 and 11. See note 69.

[34] Information collected by Mr. T. Liddle in Sunderland, and Mr. A. L. Ayre, of Newcastle.

[36] Various documents relating to Germany, published by the U.S.A. Nat. Mon. Commission.

[37] Fourth report by A. Neymarck to *La Statistique Internationale des Valeurs Mobilières.*

[38] In 1845 the amount of capital in Prussia is estimated to have been £36 per head, in England £143 per head.—Schmoller, quoted by Dr. Riesser in *The German Great Banks*, p. 28.

" The establishment in Germany of special banks of deposit was out of the question, mainly because, in view of the low level of prosperity of the population, such banks would not have yielded sufficient profit."—*Ibid.*, pp. 336–7.

[39] " Even in 1848 John Stuart Mill observed that ' the control of the operations of industry usually belongs to the person who supplies the whole or the greatest part of the funds by which they are carried on. . . . It is not uncharitable, however, to conjecture that, with ordinary humanity, the natural way to dispose of savings, which could not be used for display or self-indulgence, was in business investment. And here we have doubtless the explanation to a large extent of the way in which capital was found in middle-class business circles to finance the new inventions."—W. J. Ashley, *The Economic Organization of England*, pp. 156–9.

In the woollen and worsted trades, Dr. Clapham points out, the growth of the factory system in the North was accompanied, throughout the nineteenth century, by a transfer of capital from commerce to industry, mercantile firms buying and building mills. In the cotton trade " . . . the men who prospered were raised by their own efforts—commencing in a very humble way—and pushing their advance by a series of increasing exertions, having a limited capital to begin with, or even none at all. . . ."—P. Gaskell, *Artizans and Machinery*, p. 618, quoted by Cunningham in his *Growth of English Industry and Commerce.*

" Mr. Wilson, in his work on *Capital, Currency and Banking*, estimated that the annual accumulation of property in the United Kingdom, between 1840–45, could not be less than sixty millions sterling. And though a large portion of such saving was required in the numerous branches of industry for their own improvement and extension, there was at that time a large surplus of capital in quest of promising employment."—L. Levi, *History of British Commerce*, p. 302.

[40] This process of amalgamation is by no means a recent development. During the three decades following 1877, 1887 and 1897, the average numbers of banks disappearing annually as a result of amalgamation were :—4·2, 11·7, and 8·5 respectively. See art. by D. Fraser, *Journal of Institute of Bankers*, 1908. Early in 1920 there were in England and Wales twenty-one joint-stock and six private banks. Of their total lodgments, four-fifths were in the hands of five leading banks.

[41] " The small private banks, judging by my limited experience, are multiplying at a great rate. In every city there is a string of big stores, furniture concerns, etc., which do a considerable banking business, as an adjunct of their regular business, by taking money on deposit at a very high rate of interest and making use of it in their business in the way of advance, etc." — Dr. Schmidt, *German Bank Enquiry*, 1908–9, p. 249.

[42] These figures have been obtained in the manner described below.

Lodgments.—The *Economist's* totals of the deposits held by the Bank of England, the joint-stock and the private banks (mainly as on 31 December 1913) amount to £908 m. This aggregate may be roughly corrected (1) for abnormal expansion at the end of the year; (2) for duplication between the Bank of England and other banks; and (3) for duplication among these other banks.

(1) The following figures show roughly the expansion occurring during the last few weeks of the year:—Joint-stock and private banks: Deposits, £24 m.; Cash in hand and at bankers and Cash at short notice, £16 m. and £12 m. respectively, or £28 m. in all. Bank of England: Other Deposits, £23 m.; Other Securities, £25 m. It seems safe, therefore, to reduce each of these four totals by £23 m. to correct for the exceptional conditions at the end of the year.

(2) Mr. Withers (*The Meaning of Money*, p. 253) assumes that of the £51 m. of Other Deposits on 1 July 1908, £20 m. were held by customers other than banks. Taking Other Deposits on 31 December 1913 at £61 m. - £23 m. = £38 m., and assuming that bankers' balances (in 1908 supposed to average £22 m. to £23 m.) include £4 m. to £5 m. of deposits held by Scotch, Irish, and other not-included banks, we may perhaps deduct £18 m. from Other Deposits and Other Securities to eliminate duplication between the Bank of England and the other banks of the system.

(3) Using as a guide the aggregate Cash and Short Notice money of such banks as keep accounts with the joint-stock banks, we may roughly correct for this duplication by deducting £5 m. from Deposits and from Cash in hand and at bankers.

This leaves a final figure of £908 m. - (£23 m. + £23 m. + £18 m. + £5 m.), say £840 m., which may be separated into lodgments on current and deposit accounts on the basis of a few banks which show these items separately in the balance sheets.

Notes.—As 70–75 per cent of the active note circulation was supposed in pre-war days to be held by the joint-stock banks (vide *Industry and Finance*, British Association, p. 207), the total of notes held by the public may be taken to be £9 m.

Gold, Silver and Bronze.—Mr. Fraser (see *Economist*, 22 August 1914 and subsequent controversy) estimated that the total gold holdings of U.K. banks in June 1913 were something over £100 m. Adding £6 m. for growth and £8 m. for silver and bronze (see Annual Report of Mint), and deducting £10 m. for the probable holdings of Scotch and Irish banks, we get a total of £104 m. In view of the criticism of Mr. Fraser's figures, we may take the round figure of £100 m. as an aproximate total of the precious metals held by the English banking system at the end of 1913.

Cash at Call and Short Notice.—This figure may be fairly closely estimated from the *Economist's* summary. The estimate, £111 m., must be reduced by £7 m. to correct for expansion at the end of the year. (See under " Lodgments," above.)

Investments.—Included in this total is the figure for Other Securities reduced by £23 m. (See under " Lodgments," above.)

Uncleared Cheques.—This figure is based on the consideration that substantially the whole of one day's average Country and Metropolitan Clearings as well as a small fraction of one day's Town Clearing, is in the post each night and so carried as part of " Cash in hand and at bankers."

The statement based on these figures may perhaps be taken as broadly representative of the position of the English banking system as a whole at the end of 1913. It should not, however, be used for any but the most general purposes, of the kind for which it is employed in this book; in particular the relation between reserves and deposits which it indicates should not be used without taking account, first, of the conjectural nature of the estimate of the central gold stock and, secondly, of the effect on the volume of deposits of different methods of making loans. (See p. 136.)

The following table is a compressed statement of the aggregate figures of the five large joint-stock banks, as at 31 Dec. 1921. Their total lodgments, twelve months earlier, formed 85 per cent of those of all joint-stock and private banks (excluding the Bank of England) in England and Wales:—

	£ m.		£ m.
Capital, Reserves and Undivided Profits	107	Cash in hand and at B. of E.	256
Lodgments	1628	Cash at Call and Short Notice	108
		Investments	304
		Discounts and Advances ..	1049
		Buildings, etc.	18
	1735		1735

[43] The return was confidential. The amount owed by the Stock Exchanges to banks, financial institutions, etc., at the date of the return was apparently:—London, £81 m.; Country, £11 m. See art. by E. Sykes in *Journal of Institute of Bankers*, 1915.

[44] Sir Charles Addis, writing in July 1918, estimated that in the floating loan market there were about £300 m. bills under discount, and about £100 m. lodged by bill brokers with the banks as security against loans. Art. in *Edinburgh Review*, July 1918.

[45] These are estimates made by G. Roulleau in *Les Règlements par effets de commerce*. The total grows more slowly in the U.K. than in France or Germany.

[46] Art. "Problems of British Banking," *The Edinburgh Review*, July 1918.

[47] *Misc. Arts. on German Banking*, U.S.A. Nat. Mon. Commission, Doct. No. 508, pp. 159 and 160.

[48] G. Roulleau, *Les Règlements par effets de commerce*.

[49] Hartley Withers, *The Meaning of Money*, p. 205.

[50] For example: "In periods of active trade we know that bank loans increase and prices rise."—Mr. McKenna, Chairman of the L.J.C. & M. Bank, *The Times*, 30 January 1920. Again: "One of the reasons why there is a great increase in the number of bills at the height of a boom is the acceleration of production—so that three bills may be drawn for goods moving through successive processes where one was drawn in the same time before." —Riesser, *op. cit.*, p. 282.

[51] *Industry and Trade*, p. 631.

[52] E. T. Powell, *The Mechanism of the City*, p. 133.

[53] A. Neymarck, *Finances Contemporaines*, VII.

[54] E. Théry, *La Fortune publique de la France*, 1911.

[55] *Journal of Royal Statistical Society*, January 1911.

This estimate takes no account of the amount of private capital (possibly £300 m.) invested in the purchase of land, in trade undertakings, bank deposits, etc. To find our net foreign investments in 1919 it would be necessary to add new investments 1908–14 (cf. p. 276), and to deduct (1) perhaps £1000 m. for foreign securities sold during the war period (cf. Keynes, *Econ. Consequences of the Peace*, p. 258); and (2) the difference between war loans due to and from this country (loans to Allies reckoned at one-half their face value), say, £300 m. But the bases of these estimates are too rough to justify the quotation of any definite final figure.

[56] It is well known that prior to the war a large part of the industries of North Italy were controlled by German banks. It was stated authoritatively

before a recent Board of Trade committee that these banks had financed the electrical industry in that area to the extent of £25 m. and that the whole of that business was in their hands. The German practice in such cases seems to have been to undertake the initial financial work requisite for development; to recover their capital by the sale of securities to the public; but to retain control mainly by representation on boards of management and by the use of their customers' voting proxies. Another instance is that of the Anglo-Argentine Tramways, which were gradually absorbed by a company, nominally Belgian, really German. The present Anglo-Argentine Co., it is stated, has an English Board of Directors; but is absolutely controlled by a Belgian group which is itself controlled in Germany, all constructional work going to that country.

One banking house in Wall Street controls, or is directly influential in the management of, over one-fourth of the railroad mileage of the U.S.; practically controls one, and is represented on the Boards of Directors of the other two, of the three largest banks; is identified with three trust companies and one of the four leading insurance companies; is the chief directing force in the coal and iron trade; has close alliances with leading corporations in copper, electric light and telegraphs; while the par value of the securities of the various companies with which it is identified is upward of £1000 m.—Pratt, *The Work of Wall Street*, 1903, p. 239.

[57] Estimate by A. Neymarck of the *valeurs mobilières* actually owned by the various countries of the world in 1908. *Finances Contemporaines*, VII., p. 446.

[58] "The wholesale grocery business of this country is centred in London. . . . Sales are held periodically at the Commercial Sale-Rooms of such imported commodities as sugar, coffee, cocoa, tea, spices, etc. These are public wholesale auctions, open to every one, but in reality only representatives of the wholesale houses, and recognized brokers and agents take part in them."—W. Abbott, *Commercial Theory and Practice*, 1917, p. 252.

[59] T. Schilling, *London als Anleihemarkt der Englischen Kolonien.*

[60] Riesser, *op. cit.*, p. 354.

[61] *Misc. Arts. on German Banking*, U.S.A. Nat. Mon. Commission, 1910, p. 151.

[62] "It has been estimated that the amount now secured on the debentures and debenture stock of trading companies is not less than £500 m."—E. Manson, *Debentures of Trading Companies*, 1909, p. 1.

[63] App. to Report of the Company Law Amendment Committee, 1906 [Cd. 3053], p. 93.

[64] As a form of organization the private joint-stock company has several notable advantages over the partnership or singly-owned business.

1. The liability of the shareholders is limited, and certain other risks are reduced by the transfer of powers from partners to directors.
2. It has continuity of existence. When a member of the partnership dies, his executors incur legal risks if they postpone settlement and may incur business loss if they hasten realization of the property. With the private joint-stock form of organization such difficulties do not arise. Its existence is not affected by the death of a shareholder. Admission and retirement is a simple matter; and the sale, mortgage and settlement of parts of the property are greatly simplified.
3. It has special facilities for borrowing, owing to its ability to issue debentures and to charge its assets in a manner not open to a private business firm.

The public joint-stock form of organization also carries with it these advantages.

Further, its ability to sell its shares to the public widens the market for the sale of private undertakings and increases the power of the company to obtain the capital it needs for its development. But, inasmuch as its directors usually hold only a small proportion of its shares, it suffers much more than the private company from the weakness in the connexion between the shareholders and the directorate. See, in particular, Palmer's *Company Law*, 1916.

[65] "The Daily Money Article," *Journal of the Institute of Bankers*, 1914.

Another slightly different method is suggested by Mr. Powell. He points out that a financial house or a powerful investment trust will take up stock in, *e.g.*, a gold mine whose shares, for want of any immediate yield, cannot be publicly marketed. They take shares to provide the necessary working capital, getting perhaps a call on the remaining shares at an agreed price, and later sell them to the public.—E. T. Powell, *The Mechanism of the City*, ch. i., 1910.

It is of some importance to notice that the Committee of the London Stock Exchange have recently resolved that, before granting leave to deal in securities which are issued without any prospectus publicly advertised in this country or circular [? circulated] to shareholders, they will require publication of all the necessary details with regard to the formation and issue of the company. *The Times*, 3 December 1919.

[66] House of Commons return *re* Gas Undertakings, 1915; *re* Tramways, 1912.

[67] *The Economist's* figures are drawn from a wide field. A more limited source of the information lies in the individual issues published in *The Times*. These individual issues may be separated with tolerable accuracy into applications for capital destined for home and foreign employment respectively, the line of division actually adopted passing between investment trusts mainly concerned with foreign securities, which are placed in the latter class, and English shipping lines, which are placed in the former class, *i.e.* their capital is reckoned as employed at home. Omitting British Government and railway securities, short-term bills and municipal borrowings for unspecified purposes, the average annual applications (1912–14) for capital destined mainly for home employment was found to be approximately £21½ m., of which some £8 m. was in the form of debentures

[68] Writing of the "increase of £230,000,000 in home capital, computed in the Census of Production (Final Report, pp. 32–3) as taking place in 1907," Prof. Bowley states: "There is some evidence that this is over-estimated, and perhaps £200,000,000 may be nearer the fact. . . ."—*The Division of the Product of Industry*, p. 20, note 2.

[69] Even during the recent financial boom in cotton securities, these conditions do not seem to have changed fundamentally. A broker in close touch with these developments writes (Nov. 1919): "In general no prospectus is issued. The *modus operandi* is for an agent on behalf of a syndicate to purchase the shares of a cotton spinning company by offering the shareholders a tempting price for their holdings; for instance, if the shares in the market were worth £6, the syndicate offers £15 or £20 per share, provided all are sold. The old company is then liquidated, and a fresh one started, with a capital in accordance with the amount of the price paid for the old shares, and these new shares are taken by local people who understand the cotton business."

A word may be added with regard to the practice of spinning companies, especially in the Oldham district, of borrowing sums on deposit in the manner of a joint-stock bank. Such loans may be invited by advertisement before the mill is built. In the typical case, deposits would be made of £5 and upward; and amounts of £100 would be withdrawable on demand, amounts of £500 or so at fourteen days' notice. Depositors have for their security only the figures in their loan books and their faith in the directors; they are attracted by the simplicity of the arrangement and by a rate of interest higher than that paid by the banks. Prior to the war this simple method of obtaining capital was of considerable importance in the finance of the trade, the volume of loans, in some cases, being greater than the paid-up capital of the borrowing company. It would seem that only in very exceptional cases did any loss fall upon lenders; but the heavy proportion of loans to capital was a cause of some apprehension in the trade, and even gave rise to suggestions that the matter should be dealt with by legislative action.

This method of finance is not peculiar to cotton spinning, but it has gone much farther there than in other trades or industries. It may be noticed that, according to an official return made in 1905, some 150 boroughs in England and Wales had at that date similar borrowings amounting to nearly £3 m. In the typical case, the borough used the security of the local rates to borrow small sums from several hundred people, the conditions of repayment ranging from six months' notice to contracts for periods of fifty or sixty years.

[70] *Misc. Arts. on German Banking*, p. 154.

[71] Riesser, *op. cit.*, p. 478.

[72] "During the second epoch [1870–] credit banks, in order to avoid direct participation, have to a large extent resorted to the intervention of trust and finance companies for the purpose of exercising their promoting activity and for the financing of subsidiary banks."—Riesser, *op. cit.*, p. 345.

[73] U.S.A. Nat. Mon. Commission, Doc. 405, *Interviews on Banking Systems*, p. 223. Cf. latter part of Note 5.

[74] Art. in *Economic Journal*, Dec. 1917. (For a sketch of the development of these houses, see Mr. E. T. Powell's art. on "The Economic Function of the Finance Houses," *The Financial Review of Reviews*, Dec. 1919.)

[75] *Ibid.* Mr. A. S. Dewing in *Corporate Promotions and Re-organizations* estimates that the following figures represent fairly the capitalization of an average consolidation in the United States:—

Actual value of plant	4 million dollars.
Excess price paid	2 „
Compensation to promoter	1 „
Compensation to banker	1 „
Bonus of securities to public	1½ „
Organization expenses	½ „
	10 million dollars.

[76] ". . . modern company promoting is undertaken by the vendor."—Debate on second reading of the Companies Bill, 1900, *Hansard*, vol. 84, 1900. Mr. Lawson Walton, confirmed by Mr. Martin.

[77] *Ibid.* Mr. Holland.

[78] *Interviews on Banking Systems*, p. 394.

[79] These statements on foreign company law are taken from W. J. Greenwood's *Foreign Stock Exchange Practice and Company Laws*, 1911.

[80] Art. in *Economic Journal*, Dec. 1917.

[81] See debate on second reading of Companies Bill, 1900.

[82] Art. "Boom Prospectuses," 1910.

[83] Cd. 3052, p. 10.

[84] Palmer's *Company Law*, 10th ed., 1916, chap. i.

[85] H. Lowenfeld, *All about Investment*, p. 175.

" I do not know whether the Attorney-General is aware of the nature of the amounts now paid by the promoter of a company. Take, for instance, the solicitor. The solicitor very often gets £1000 for putting his name on a prospectus. . . . This applies also to the brokers on the Stock Exchange. They very often receive £1000 for putting their names on a prospectus. . . ." —Debate on second reading of the Companies Bill, 1900. Mr. Labouchere.

[86] Board of Trade Annual Reports on Companies.

[87] *The Mechanism of the City*.

[88] Cf. in particular, art. on " The Provincial Stock Exchanges," *Economist*, 1914.

[89] *All about Investment*.

Mr. Lowenfeld is no doubt using the term " free market " in a narrow sense. There are very large numbers of stocks for which a price both ways will not usually be quoted, but which an investor can nevertheless buy or sell on the market at a reasonable margin of price.

" These [smaller companies] often have to issue their ordinary shares in the first instance in their own neighbourhood. . . . The dealing in, or the issue of, these securities, which are often perfectly substantial, is often almost, if not quite, impracticable."—R. H. I. Palgrave, art. in *Quarterly Review*, Jan. 1918.

[90] In a memorandum of Jan. 1920 (Cmd. 594) the Board of Inland Revenue draw attention to the influence on market quotations of the " common practice in industry (from motives of prudence) to create reserves which are not disclosed in published balance sheets. . . ." They point out (*a*) that in consequence of this the market has not always full knowledge of the assets of a business; and (*b*) that the investor would usually value the shares of a company more highly if its policy were to distribute, say, one quarter of its profits in dividends, carrying the remainder to reserve, than if its policy were to distribute a larger proportion of its profits to its shareholders. In a number of cases which they investigated, market quotations indicated a capital substantially below the true value of the business, *i.e.* were below investment values.

[91] It is of some importance to bear in mind " the huge difference," as a member of the Stock Exchange expresses it, " between effective jobbers in a market who have the capital and brains to . . . ' run a book,' and the myriad parasitic jobbers who deal from hand to hand in their wake, rarely . . . buying or selling from the public without knowing where instantly to undo the business."

[92] During the war, time dealings have been abolished. At the end of 1920 they have not yet been reintroduced.

[93] Most of these particulars are taken from Clapham's *Woollen and Worsted Industries*.

[94] Abbott, *Commerical Theory and Practice*, pp. 246, 247.

In one large London merchant house the average length of credit granted was 3·15 months. (Information given by a London Accountant, 1912.) Another large merchant house in Cheapside states that practically all their goods are sold on credit and that the average period of credit is about four months. Another similar firm says that their cash sales are very small, and that three months is the probable average period of credit.

[95] Cd. 9338, p. 12.

[96] Cd. 9092, p. 22.

[97] Cd. 9073, p. 17.

[98] Abbott, *op. cit.*, p. 257 and p. 119.

[99] L. D. H. Weld, art. "Marketing Functions and Mercantile Organization," *The American Economic Review*, 1917.

[100] Art. "The Recruiting of the Employing Classes from the Ranks of Wage-Earners in the Cotton Industry," *Statistical Journal*, Feb. 1912.

[101] Information given by prominent business men in the industry.

[102] Cd. 9073, p. 32.

[103] Information given by such bodies as Chambers of Trade. D Marshall, referring to the practice of selling goods on credit, writes: "This tendency undoubtedly often makes for an undue extension of the number of traders, and especially of retailers; and there is probably some ground for the suggestion that there are more traders in many countries than are needed for the work."—*Industry and Trade*, II. vi. 4.

[104] Cd. 9079, App. VIII.

[105] "It is a most valuable asset to the retailer to have a reputation for prompt payment. He often receives special terms and discounts, and frequently has opportunities afforded of acquiring good lines of goods which are denied to his colleagues who are less punctual in meeting their obligations."—Abbott, *op. cit.*, p. 128.

[106] *Principles of Political Economy*, iii. 12, § 5.

[107] Prior to the war it was apparently a common practice for leather merchants to give five or six months' credit, generally in form of bills. Producers of leather and shoes have since then greatly increased their financial stability, and the system of trade credit has "vastly improved." 2½ per cent discount for payment in thirty days (rarely longer) are now the general terms. Art. *Boot and Shoe Trade Journal*, March 1918.

[108] *Industry and Trade*, p. 786.

[109] *Les Règlements par effets de commerce.*

[110] *Principles of Economics*, 5th ed., iv. 12, § 12.

[111] *Census of Production*, 1907, Final report.

[112] C. K. Hobson, *The Export of Capital.*

[113] *Statistical Journal*, Feb. 1912.

[114] See Bowley's *The Division of the Product of Industry*, f.n. p. 20.

[115] Information given by prominent business men in the industry.

[116] *Woollen and Worsted Industries.*

[117] The result of inquiry made among business men by Mr. K. Broadley.

[118] *Industrial Gloucestershire*, 1904.

INDEX

Abbott, W., on credit buying, 264; on elimination of wholesaler, 266
Addis, Sir C., on bank competition, 149; on bill market, Note 44

Bank Act, 1844, 126, 165
Bank of England, as central bank, 157–60; rate policy of, 56–9, 62, 161–4, 169–70
Bank notes, in U.K., 38, Germany, 41, France, 42; control of issues of, 165–6
Bank reserves, influences determining size of, 135–8; real costs of, 137–9, 142, 143
Banks (U.K.), central, 128, 157–60; competition among, 149; concentration of, 127, Note 40; control of currency by, 49, 150–3, 156–60; control over industry by, Note 56; distribution of resources by, Chapter XXI, 31, 181; policy in business cycles of, 56, 171–6, 180–1; profits of, 145, 149
Bargaining knowledge, in Produce markets, 190; in Securities markets, 190–1, 193–4, 207–8, 214–5; of jobbers and speculators, Chapters XXXVIII–XLII
Bill brokers, services of, 142
Bills of Exchange, 40, 48, 106, Note 14, Note 44; in the U.K., France and Germany, 143–4
Book debts. See Trade Credit
Boot and Shoe trade, 266, 268, 270, Note 107
Bowley, Prof., Note 68
Brae, H. H., 252
Branch bank system, 113, 144–5
B.S.T. Ltd., 209
British Trade Corporation, 212
Broker. See Bill brokers, Stock brokers
Building societies, 280
Business ability, its junction with capital, 3–4, 103–4, 187, 275
Business cycles, 20, 47–8, 52–6, 71–2, 171–6, 180, 181–2, 271–2

Capital, Command over, 12; composite supply price of, 72, 101; export of, 69, 186, 205–6, 276, Note 55; free, 11; period of supply of, 92–7; social demand for, 88, 162–3
Chapman, Prof., 267
Cheque currency, cost of, 139, 147–9; efficiency of, 38; influence on transport of capital of, 144–5; method of issue of, 129, 131, 150–1; use in U.K. of, 39, in U.S.A., 41, in Germany, 41, Note 12, in France, 42, Note 14
Clapham, Dr., 278, Note 39, Note 93
Company law, 214–6
Company promoter, 58, 80, 122, 208, 213–4, 215, 217–8
Cotton industry, 203, 208, 267–8, 278, Note 69
Cox, A. L., on mortgages, 115–6
Credit, definition of, 15, Note 1; disturbing influence of, 20, 40–1, 55–6, 168; functions of, 16, 17, 19; personal, 105–6
Crédit Foncier, 105, 108, Note 27
Currency, definition of, 15; of U.K., 37–9, of France, 42, Note 13, Note 14, of Germany, 41, Note 10, Note 12

Debentures, 80, 107; volume of, 201, Note 67
Demand, for money and capital distinguished, 159
Discount, Houses, 142; market rate of, 56–9, 64, 95–6, 162–4, 168
Done, J. J., on mortgages, 116
Duguid, C., 203

Economist, The, 194, 204, 205
Engineering trades, 266, 279

Federal Reserve system, 166
Fisher, Prof. Irving, 55, 174
Foxwell, Prof., 212, 213, 216, 283
France, bills of exchange in, 144, Note 14; cheques in, 42, Note 14; company law in, 214–6; credit in, 18; currency in, 42, Note 13; mortgages in, 105, 108, 115, Note 27; number of banks in, 127; seasonal demand for money in, 169; securities market in, 105, 109, 183, 185, 211, Note 5

Gas and Tramway undertakings, 205
Germany, bills of exchange in, 144; cheques in, 41, Note 12; company law in, 214–6; credit in, 18; credit banks in, 109–10, 125–6, 183, 197–8, 209–11, Note 56, Note 72; currency in, 41, Note 10; giro system in, 41, Note 12; mortgages in, 115, 117–8, 126, 169; note issue in, 166; number of banks in, 127, Note 41; People's banks in, 106, 126; seasonal demand for money in, 169; securities market in, 205, 109–10, 183, 197–8, 209–11, 213, Note 72
Giffen, Sir Robert, 120, 277, Note 8
Giro system, 41–2, Note 12
Gold, in money use in world, 47, in U.K., 37, Note 3, in France, 42, Note 13, in Germany, 41, Note 10
Goschen, 71
Greenwood, W. J., Note 79

Hobson, C. K., 69, 276

Insecurity, 92–6, 113
Investment, Chapter XI; foreign, 69, 186, 205–6, 276, Note 55; French, Note 5; home, 66–72, 204–6, 277–81; influence on money supply of, 70–1; of banks, 31, 128, 142; risky and safe, 87–9; individual and social, 68
Iron and Steel Industries, 279
Issue Houses, 80, 122, 183, 195–6, 198, 212
Issue of notes, and of cheque currency, 39, 147–8; regulation of, 165–6

Jevons, 14, 55
Jobbers, Chapters XXXIX, XL, 223, 236; costs of, 241–2; function of, 236, 240–1; importance of strong, 230, Note 91; and new issues, 197; profit of, 244; "turn" of, 80, 241
Joint-stock companies, advantages of, 187, Note 64; capital supplied to, 204–5; fraud in, 217–8; influence on demand for capital of, 107; law *re*, 214–6; losses of, 217; numbers of, 201–2; public and private, 201–2, Note 64; use of, in various industries, 278–80

Law, German industrial, of 1884, 216; influence of, on demand for capital, 107–8; *re* company formation, 214–8
Linen industry, 278
Loan rates, inequality in, 145; to Stock Exchange, 142
Loans, and overdrafts contrasted, 136; to Stock Exchanges, 142, 231
Lotteries, 89
Lowenfeld, H., 219, 221

Market rate. See Discount
Marshall, Dr., 27, 33, 55, 152, 176, 275, 283
Mill, J. S., 270, Note 39
Money, as part of the system of communications, 2–3; definition of, 15; essential properties of, 34–5, 60; imperfect homogeneity of, 44–5; peculiarities of, 9, 10, 22–3, 27; seasonal demand for, 169–70; services of, 8, 29, 30; sources of expansion of, 48, 50, 64
Mortgage banks, 105, 108, 117–8, 126
Mortgages, 95, 105, 108, 115–7, 119, 126; in France and Germany, 115
Municipalities, loans to, 116, Note 69; sale of securities by, 184, 228

Negotiable securities. See Stock Exchange Securities
Neymarck, A., on French investments, Note 5; on world issues of securities, 185
Note issues, and issues of cheque currency compared, 39, 147–8; regulation of, 165–6

Organic influence of market, 1–5, 187, 274–5

Paish, Sir G., on foreign investment, 186, 276
Palmer, Sir F. B., on company formation, 217
People's banks, 106, 126
Period of supply of capital, 92–7
Pigou, Prof., 87, 283, Note 26
Powell, E. T., 118, 120, 220
Provincial markets for securities, 203, 208–9, 220–2, Note 69, Note 89
"Purge," The, 108

Retailers, 266; excessive numbers of, 114, Note 103; and trade credit, 106, 114–5, 264, 267–9
Risk (Chapters XIII–XV), nature of, 85–9; reduction by market of, 30, 80–1, 83, 104–8, 122–3, 224–5, Chapters XXXII–XXXIII, Chapters XXXIX–XLI
Room and Power companies, 267, 278
Roulleau, G., Note 45

Sauerbeck, Dr., 46
Saving. See Investment
Schilling, Dr., 196, 197
Security, function of, 104–5; creation of, 107–8
Shipbuilding, 116–7, 265–6, 279

Silver, in money use in U.K., 38, in France, 42, Note 13, in Germany, 41, Note 10
Smith, Adam, 89
Social demand for capital, 88, 102–3
Solicitors, market formed by, 117–8
Speculation (Chapters XXXVII–XLII), definition of, 235; on Produce Exchanges, 236, 238, 241
" Stags," 198, 233
Stamp, Dr., 217
Standard of value, 10, 34, 55
Stock brokers, services *re* new securities of, 184, 196–7, 209, 214; services *re* old securities of, 221, 223, 240, 243, 245
Stock Exchange securities Annual issues of, world, 185, London, 194; costs of issue of, 197–9, 218–9, Note 75, Note 85; market for, in Germany, 105, 109, 197–8, 209–11, in France, 109, Note 5, Note 27; Provincial markets for, 203, 208–9, 220–2, Note 69, Note 89; social influence of, 186–8, 231, Note 56; two markets distinguished, 122–3; volume of home industrial, 201–4, 277–80

Trade credit, and volume of purchasing power, 39–40, 266–73; and transport of capital, 114–5, 263–9
Treasury notes, 50, 59, 63
Trust and Finance companies, and foreign investment, 71; and the investor, 00; as Issue Houses, 183–4, 190, 212; B.S.T. Ltd., 209; work of, 118–21

Uncertainty, Chapter XIV
Underwriting, 184, 196, 209, 215, 233, Note 28; rates of, 197, 198, 219
U.S.A., corporate promotions in, Note 75; Federal Reserve Board, 166; New York Stock Exchange, 223, 252; number of banks in, 130; trade credit in, 207; use of cheque currency in, 41; wheat market in, 252

Valeurs mobilières. See under Stock Exchange Securities
Valuation of assets of joint-stock companies, 215–6

Waiting, Chapters XI, XII, definition of, 73, 97; influence of market on, 80, 94, 123–4, 134, 224–5, 281
War, influence of, 49, 50, 62–4
Wholesalers, as agents for supply of capital, 114–5, 267–8, Note 94; decline of, 266; influence on supply of purchasing power of, 48, 172–3, 272
Withers, H., 169, 171, 246
Woollen and Worsted Industry, 263–4, 278–9, Note 39
Work of management, 80, 119, 120, 123, 226, 275

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